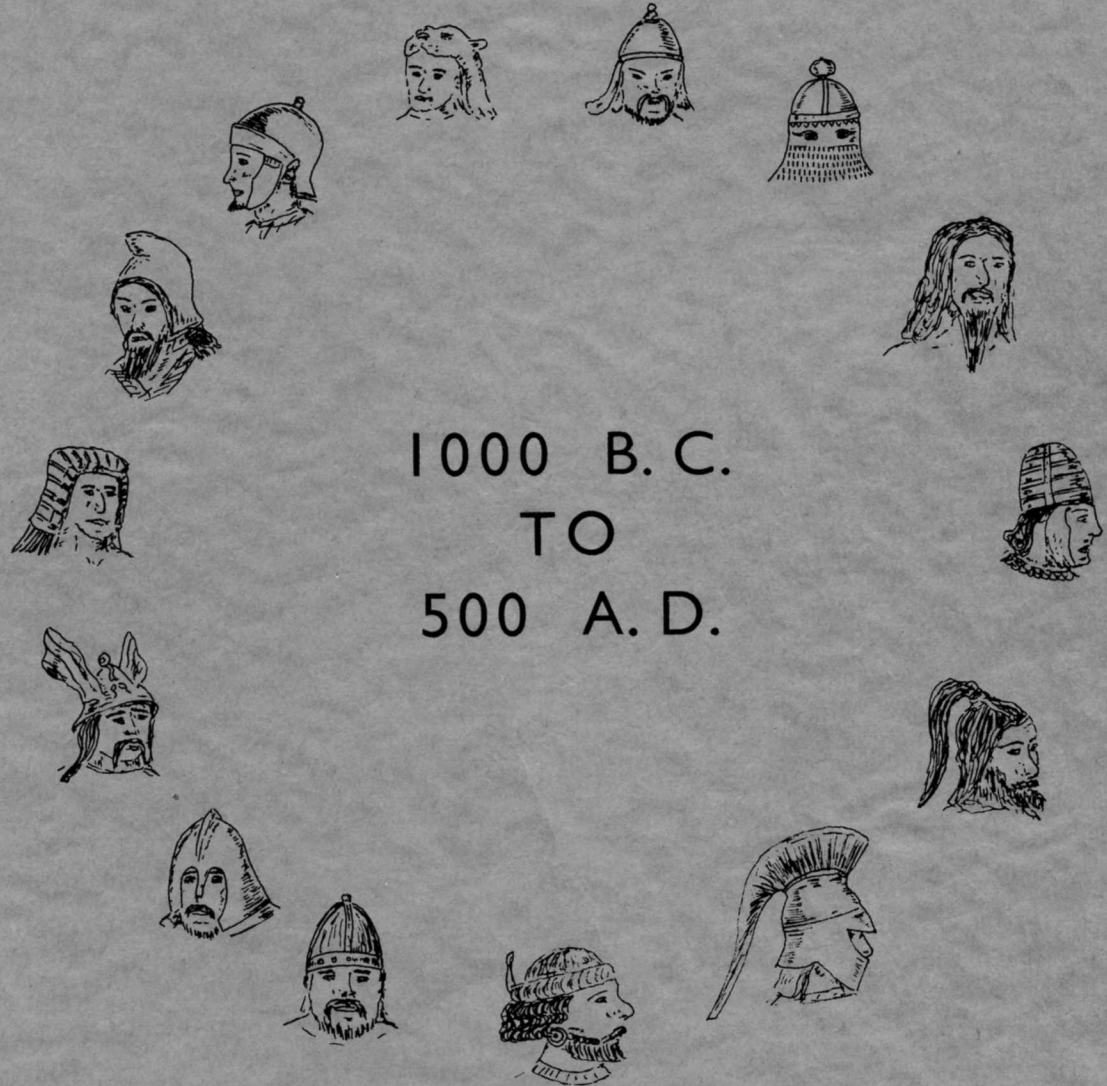


# WAR GAMES RULES



1000 B. C.  
TO  
500 A. D.

# ANCIENT WARGAMES RULES

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## TROOPS

### SCALES

As the recommended ground scale is 1" to 10 yards, each figure will represent 20 men, the number of men who would occupy the area covered by its base.

This is based on the Roman heavy infantry formation described by Vegetius with 3 feet frontage per man and 6 feet depth, and upon the base sizes for figures quoted later.

The formation is assumed to be 5 men wide by 4 deep.

Note: 1mm to 1 yard is also a possible scale, though with several disadvantages, but will not be used in these competitions.

Should it be desired to use it on other occasions, bear in mind that each figure will then represent 50 men.

### TYPES OF FIGURE

Elephants, chariots and engines and their crews are treated as a single figure (but see P. 14).

Troops will be assumed to be armed with the weapons depicted by the figure representing them, with two exceptions.

1. Officer, standard bearer and musician figures will be assumed to represent the majority type of the rank-and-file in their unit, as they represent 1 special figure and 19 others.  
The General figure in a similar way includes the great man himself and 19 members of his inner guard.
2. Figures apparently armed only with a sword are assumed to have throwing weapons as well. These will be the normal weapons for their type, i.e. Legionaries will have Pila, Britons light javelins.
3. Engines are divided into stone throwers with a crew of 4, heavy dart throwers more than 1 3/4" across their throwing arms, also with a crew of 4, and light dart throwers with a crew of 2.

They are also classified by their standard of protection and normal mode of fighting, whether in close or loose order.

1. Light troops fight in loose formation as skirmishers. They will usually have a light shield, and may have a leather jerkin.
2. Medium troops fight shoulder to shoulder. They will usually wear leather body protection, but may instead have a larger than normal shield or be assumed to have special skill in using it.  
The formation is the most important characteristic.
3. Heavy troops are mediums with the addition of metal armour covering the torso.
4. Super heavy cavalry are heavy cavalry whose horses are also clad in metal armour
5. The standard of protection of chariot and elephant crews and their animals is not relevant to these rules.

Camel riders in most circumstances are treated as cavalry of equivalent type.

Light, medium or heavy troops may be found without shields. This is penalised in the rules, but does not affect their classification.

A distinction is also drawn between regular troops in formed units fighting under officers and wearing uniforms, and barbarians fighting under tribal leaders. For the purposes of these competitions, only Greek, Roman and Roman auxiliary troops under Roman officers will be regarded as regulars, also 1/3rd. (points) of a Persian, Carthaginian, or an Assyrian army.

It should not be assumed that barbarians are necessarily inferior; in many circumstances they will be found to be more effective than regulars.

### BASE SIZES

Figures must be fixed on bases of specific sizes. Frontages must be rigidly kept to, depths are recommendations only.

Light infantry	3/4"	front.	3/4"	depth
Medium and heavy infantry	1/2"		3/4"	
Light cavalry	1 1/8"		1 1/2"	
Medium, heavy and super heavy cavalry	3/4"		1 1/2"	
War engines, Chariots and Elephants	1 1/2"		As required.	

In case you do not already use bases, they can be cut from beer mats, which do not warp, or from card or sheet lead.

It will be found convenient to mount figures in multiples, with sufficient single figures to facilitate removing casualties.

For example, 3 heavy or 2 light infantry can be mounted on a base 1 1/2" wide by 3/4" deep.

## POINTS VALUES

As different troops cost more or less to equip and maintain than others, points values have been allocated to each classification.

These should be multiplied by the number of figures to give the points value of the army.

Where regular troops have a higher value than barbarians, it is because their drilling and training costs money, where the reverse is the case, it is because metal armour is much harder to come by for a barbarian who has no government arsenal supported by tax payers backing him up.

3 man Assyrian chariot ..... 25

	Regulars	Barbarians
Commander in Chief .....	100	100
Subordinate General.....	50	50
Elephant.....	—	25
Heavy war engine.....	25	—
Chariot .....	18	15
Light war engine .....	15	—
Super heavy cavalry .....	12	15
Heavy cavalry .....	10	12
Light and medium cavalry.....	8	6
Heavy infantry .....	6	9
Light and medium infantry .....	4	3
Variation for A type troops.....	plus 2	not allowed
“ ” ” B ” ” .....	plus 1	plus 1
“ ” ” E ” ” .....		minus 1
Extra for Troops with both bow and shafted weapons .....	plus 3	plus 1
Reduction for shieldless troops other than SHC .....	minus 1	minus 1
Unit Commander .....	10	25
Commander of specialist sub unit acting as part of main unit	5	15

## COMPETITION ARMY

An agreed total of points with completely free choice, provided that the army does not include any troops that its ancient prototype did not.

For instance, if you wish to use elephants, the rest of your troops must be Hellenic, Persian or Indian. If super heavy cavalry, Persian or late Roman, or if of the right type, Sarmatian.

If Chariots, Assyrian, British, Egyptian or Persian, depending on type of chariot. Only Romans, Greeks, or late Sassanid Persians can use artillery.

If in any doubt about the validity of your choice, the Group will be glad to advise.

Only 1 General is allowed for a 1,000 point army. If he personally commands a unit (i.e. no other command points) it must be A or B type and not more than 15 figures strong.

The winner of the battle, in case any doubt exists, will be the side with the highest points value at the end. This will be made up from the values of all remaining figures, plus any points previously agreed for control of specified terrain features.

A feature is defined as under control if a friendly force is occupying it or blocking direct enemy access to it, and if no enemy is able to charge that force next period.

If an enemy is able to charge next period, the occupying or blocking side may claim half the points, the other side, none.

Non-competition games will normally be considered a draw if one side does not end up with a 10% points advantage over the other.



## ORDERS

A battle will commence with each general writing down the orders that each unit will normally follow until they are changed by fresh orders, or as a result of forced action following attack, or positive reaction from a test.

Orders should take the same form that they would in real life, and should be as concise as possible while still conveying properly the action that is required. In competition games, or any games where an umpire is employed, any ambiguity will be exploited by the Umpire as a matter of duty, as the prime aim of these rules is to encourage skill in generalship, by bringing out some of the difficulties of Command and placing more emphasis on production of a reasonable Battle Plan, rather than each General moving each unit as though he were present on the spot in each case. As examples, the order "Move South West" may result in troops leaving the field completely, while "Take the wood in front" could be unfortunate if there are two woods.

### Commencement and General features of Orders.

1. Unless specifically stated in orders, each unit may adopt any formation that it pleases, and will move at its full normal speed.
2. A unit cannot be ordered to move to a feature that it cannot "see" from its starting point, although it *can* be told to move in a direction which will eventually take it to the unseen feature.
3. Unless the route is stated in Orders, a unit will proceed direct to its objective, or in the direction told.
4. A unit may at any time Halt, provided it is not subject to any forced reaction effect, including any forced move after combat. Having halted, it may adopt any defensive formation it pleases, It will still be subject to the latest order received, and may at any time try to carry it out.
5. Missile troops without definite orders can at all times be assumed to use their missile power against any target to their front, and can adjust their formation so as to bring the most men to bear.
6. Cavalry unless their orders specifically forbid it, may always countercharge attacking frontal cavalry, provided their final Reaction Test score totaled 6 or more.
7. Light infantry, unless specifically forbidden in their orders, may always evade if possible, and unless armed with javelins or a terrain factor is in operation, will always attempt to evade charging heavy or medium cavalry.
8. Light troops may be ordered to skirmish, which means that they will close to within their own missile range and fire, but will evade if enemy tries to close. They may then return to skirmish in the next period, and so on. They may evade when skirmishing where an enemy unit would otherwise make contact with them, even though the enemy may not be carrying out a charge move. Evade move need not necessarily be carried out by whole unit, but may be confined to only those troops directly threatened with close contact.

## Change of Orders.

1. Fresh orders may be issued at any time, but must be justified by events visible to the General figure, or reported to him by messengers or patrols. These orders must be passed to the unit(s) concerned by means of messengers travelling at normal speed for their type, except that they can gallop for one period during each trip. The same applies to the General. The messengers count as 20 men for fighting purposes and can form a body guard when not employed otherwise.
2. Simple pre-arranged visual signals can be used, action to be assumed to be set off by signalling from the standard. Such signals are assumed to be effective at up to 25 inches from the General's standard to a unit standard, but a player who intends to use this system will have to limit the pre-arranged orders to four, and must write down their type beforehand, to be able to satisfy both his opponent and the umpire when he makes use of the signalling system during the battle. When this is used it must be remembered that a signal will apply to all units that can "see" it unless the original definition stated that it would apply to certain unit(s) only.
3. The C in C may order *direct* any unit to which he may at any time attach himself. He and his Standard must be placed in the centre of the unit and it can then be moved exactly as he himself moves. Such a unit is still subject to the usual Reaction Tests, but is "steadied" considerably by his presence.
4. One period is required to dictate an order, listen to a report, or for a unit to digest a newly received order.
5. When fresh orders are issued, they are to be written down on the order sheet or card at once, but are not to be implemented until the messenger reaches the unit, this implementation to be shown on the order sheet by underlining the order. In the case of a flag signal implementation is on the actual signal. The unit will then act on the new orders in the period after the messenger reached the unit's standard, or the visual signal was given. When the order has been carried out and completed, or altered, or displaced by a Reaction order, or the unit breaks, the current order must be crossed out with a diagonal line, and the unit (after it has rallied where necessary) will wait in the final position it has reached, until it receives further orders, or has a positive result from a reaction test. It will still be subject to enemy action and may act as in 5,6 and 7 under General features of Orders.
6. Apart from receipt of fresh orders, a unit may have its current orders displaced by:-
  - (i) a positive result from a Reaction Test (see table)
  - (ii) a break from close action (see After Combat)

### **Unit/Troops types.**

The classification of troops according to arms and equipment is given elsewhere in the Rules.

Shown here is an attempt to classify the type of unit for the purposes of varying reaction on the field.

- A - Guard and Household troops of the highest calibre.
- B - Elite regulars, personal followings of barbarian war leaders.
- C - The great bulk of trained troops other than those above, including most Auxiliaries and mercenaries, but not "native" levies.
- D - Levies, barbarians, etc. of known fighting value, but not highly organised or disciplined.
- E - Levies, peasants, etc. loosely organised, and of doubtful fighting value.

The Tables will show that differing types have different reaction values, so that the probability of Guard troops carrying through an order would be many times greater than Group E, who would be likely to break and run with only small or moderate factors affecting reaction.

One, or more elephants acting in company counts as a "D" class unit.  
Artillery is not subject to Reaction or organised in units.

## THE REACTION TEST

The object of this Test is to simulate the pressures and stimuli that may affect a unit's actions on the field, taking into account the type of men in the unit, and the orders that it may have been given.

1. The Test *can* be taken at any time, at the discretion of the player, *except* when the unit is -
  - (i) engaged in close fighting OR
  - (ii) Broken and running OR
  - (iii) Pursuing, for the first period of pursuit only OR
  - (iv) Carrying out a positive reaction table direction which may continue for two or more periods in some cases.
2. The Test *must* be taken in the following circumstances -
  - (i) The first time the unit is fired on or comes within charge reach of enemy troops, or when subsequently sighting or being fired on by an enemy previously hidden by natural cover, at a range of 50 yds (5") or less, unless previously explicitly warned of their presence.
  - (ii) When being charged - ON EVERY OCCASION.
  - ← (iii) Before attempting to come to close quarters fighting, if so ordered - ON EVERY OCCASION.
  - (iv) When any friendly unit breaks, within 15 inches - ON EVERY OCCASION (this test cannot be taken where the unit under consideration is itself engaged in close quarter fighting)
  - (v) Where a unit loses 2 men per figure present to missile fire (including skirmishers) in one period - ON EVERY OCCASION.
  - (vi) When a unit falls below 50% strength - IMMEDIATELY this happens. This test overrides all considerations in 1 above, so that it can be taken when at close quarters, or in any of the situations shown where it does not normally apply. If engaged in close fighting it will only count any friendly unit(s) within 3 inches, and no others. A unit getting any result worse than Halt will continue off the field, and will not return. If it is prevented by enemy action from leaving, and is engaged in close fighting, it will surrender. (i.e. where surrounded where enemy units can prevent a move away.)
  - (vii) When standing infantry with orders to hold a position or feature have thrown back an infantry attack, (i.e. attackers have lost most and go back 3 ins.) If victors do not wish to follow up they must score lower than the score for uncontrolled advance for their type - rest of the chart is ignored for this purpose.
  - (viii) On the death or capture of their General or C in C within 15 inches.
3. All tests, except 2(ii) & (vi) will be taken at the end of a period, and the result will govern action for the following period, and for any further periods, according to the chart.
4. Test 2(ii) will be taken at the point where the attacking enemy unit has completed its normal move distance and is starting on its charge bonus. If contact has already been made within the attacking units normal move distance (allowing for any obstacle factor) then no Test need (or can be) taken by the unit receiving the attack. This is always subject to the provisions of Rules 6 and 7, under General features of Orders, for Cavalry and Light Troops.
5. **Procedure**

Throw three dice - use 233445 dice for regular troops, normal dice for barbarian and Asiatic levies. Add or deduct factors in the following tables, read final score on Reaction chart and follow the instructions in the appropriate Unit type column.

When unit strength falls below two thirds in figures, use two dice only, when below one half, one die only.



# REACTION TEST

2 (iii)

Troops in uncontrolled advance charge automatically without testing.

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**Addition of ONE for the following -**

- Each Friendly unit within 15 inches, and in view.
- Any other Friendly units in sight.
- Any friendly unit(s) advancing within 15 inches.
- Any friendly unit(s) charging within 15 inches.

~~Any friendly unit(s) within 15 inches of the enemy.~~

- Rear support..
- Any enemy unit retiring or retreating within 15 inches.
- Any enemy unit within 15 inches presenting flank or rear.
- Uphill from any enemy within 15 inches
- "Friendly" cover within 10 inches.

**Addition of Two for the following -**

- Each enemy unit routing within 15 inches.

**Deduction of ONE for the following -**

- Every enemy unit within 15 inches and facing.
- Any other enemy unit(s) in sight.
- Any enemy cavalry within 15 inches.
- Any enemy unit(s) advancing and within 15 inches.
- If under fire by at least 10 figures.
- Any enemy unit(s) on flank.

~~Any enemy unit(s) within 15 inches of the enemy.~~

- If downhill from enemy.
- Any friendly unit(s) retiring or retreating within 15 inches.
- If disorganised.
- For every sixth of original strength already lost.
- If own unit retiring or retreating.
- Own troops armed with bows.
- Own troops do not carry shields.
- Enemy elephants or chariots within 10 inches
- Enemy troops just sighted within 5 inches.

**Deduction of TWO for the following -**

- Each friendly unit routing within 15 inches.
- Any "unfriendly" cover within 10 inches.
- Enemy unit(s) directly in rear or in path of retreat.

**Special Situations**

- C in C with unit to be tested - plus or minus 3.
- C in C within 15 inches (unless retreating or routing) - plus or minus 1.
- Behind cover or field defences - plus or minus 2.
- In square - plus or minus 2.

Each secure flank — plus or minus 1

## Definitions —

**Support to rear —** friendly unit within its normal move distance, immediately in rear, not disordered, and at least half own strength, and not engaged in close fighting. It must be capable of moving up to support. (i.e. it is not Support if the other side of an impassable river).

**Secure Flank —** either friendly cover within 1 inch of unit flank or flank resting on an impassable obstacle, or a friendly unit on flank and capable of moving figures into contact with that flank - same conditions as rear support.

**“Friendly cover”** *Known* to be occupied by own unit(s) or known to be free of enemy troops.

**“Unfriendly cover”** *Known* to be occupied by enemy troops, or about which nothing is known.

The expression “within” in the factors above, means measurement from standard to standard, always with proviso that the other units or features are also in view. Also, any units that may be taken into account for reaction purposes, must not have an impassable obstacle between them and the unit being tested- e.g. an enemy unit on the other side of an impassable river does not count as minus 2, as it might normally do, but is ignored by a unit it cannot be expected to reach in the normal course of events.

**REACTION EFFECT CHARTS:**

1. Unit still subject to current order.

A	B	C	D	E
-2	-1	1	2	3
-1 TO +2	0 TO 2	2 TO 3	3 TO 4	4 TO 5
3	3 TO 4	4 TO 5	5 TO 6	6 TO 8
4 TO 13	5 TO 13	6 TO 13	7 TO 12	9 TO 12
14 TO 16	14 TO 15	14 TO 15	13	13
17 +	16 +	16 +	14 +	14 +

BREAK AND RUN, IF UNDER FIRE OR BEING CHARGED – OTHERWISE RETREAT (BACKS TO ENEMY) FOR 3 PERIODS

RETIRE – DISORGANISED, BUT WILL FACE ATTACK – 2 PERIODS

HALT – 2 PERIODS

CARRY ON WITH CURRENT ORDER OR TAKE ANY PERMITTED OPTIONAL ACTION

ACT AS C in C WOULD WISH – WRITE NEW ORDER AND IMPLEMENT AT ONCE

UNCONTROLLED ADVANCE IN ATTEMPT TO CONTACT (2 PERIODS) AND CONSIDER CURRENT ORDER CANCELLED

2. Unit no longer in possession of current order, or order completely carried out and not replaced

A	B	C	D	E
-2	-1	1	2	3
-1 TO +3	0 TO +4	2 TO 5	3 TO 6	4 TO 8
4 TO 7	5 TO 8	6 TO 9	7 TO 10	9 TO 11
8 TO 12	9 TO 12	10 TO 13	11 TO 13	12 TO 13
13 TO 15	13 TO 15	14 TO 15	14	14
16 +	16 +	16 +	15 +	15 +

BREAK AND RUN, IF UNDER FIRE OR BEING CHARGED – OTHERWISE RETREAT (BACKS TO ENEMY) FOR 3 PERIODS

IF PURSUING HALT – DISORGANISED – 1 PERIOD  
IF ALREADY HALTED – RETIRE FOR 2 PERIODS

MOVE TOWARDS NEAREST FRIENDLY TROOPS BUT AWAY FROM ENEMY – OR MOVE TOWARDS NEAREST COVER OR HILL IN REAR – 2 PERIODS

MOVE TOWARDS NEAREST ENEMY – 2 PERIODS

ACT AS C in C WOULD WISH – WRITE NEW ORDER AND IMPLEMENT AT ONCE

UNCONTROLLED ADVANCE IN ATTEMPT TO CONTACT (2 PERIODS).



## MOVEMENT

### GENERAL

Both sides move simultaneously, before any firing or hand-to-hand fighting takes place. The normal move for close order troops, that is, super heavy, heavy and medium, is based on walking speed for infantry and a slow sitting trot combined with walk for cavalry.

The move for light troops, who are always in loose order, is based on a jog trot for infantry and an easy canter for cavalry.

Charging, evading enemy charges, and crossing obstacles or bad terrain are dealt with under separate headings.

The time period during which the movement takes place is 30 seconds.

NOTE: When using the alternative mm scale, it is advisable to double this.

### CHARGING.

A charge is any move intended to result in hand-to-hand combat during the same period.

It starts at normal speed, but assumes that cavalry gallop the last 150 yards, and that infantry run the last 25 yards.

NOTE: For this reason, if using the mm scale, do not double the charge move, but *add* one normal move.

The gallop or run portion of the charge must be in a straight line at right angles to the charging units front.

Any wheeling must be completed before normal move distance is exceeded. The remaining part of the charge must be in a straight line at right angles to the charging units front.

Formation may not be abandoned to charge except by troops out of control. Troops wishing to count as countercharging (moving forward to meet attack) can only claim this if they can wheel to face in time.

Troops having rallied during the preceding period may counter charge but not charge.

### EVADING

Light troops with any figures more than 2 ranks deep cannot evade.

The evade is an automatic turn and rapid retreat, possible only to chariots, light cavalry, (but not camels) and light infantry.

It must follow an enemy charge directed at the evading troops, and troops go straight back at right angles to their front for 100 yards or 10".

If an impassable obstacle intervenes, subtract 50 yards from their remaining movement, while they change direction to go round it.

If evading troops cannot move far enough to get beyond reach of attacking units remaining charge distance, they will be caught with their backs turned and cannot defend themselves,

Evading light infantry can pass through another unit without penalty to either. Other evading troops will disorganise any close order troops they pass through.

If a charge is successfully evaded, charger rallies back next period 100 yds. or 10" from furthest point reached if mounted, or 30 yds. if elephants or foot. Evaders rally in their final position. If chargers wish to follow evaders through a hostile unit, both sides must test charge reaction in normal way.

## TERRAIN FACTORS

If the move includes crossing an obstacle such as a stream, ditch, hedge or wall, deduct  $\frac{3}{4}$  of the move for mounted troops and  $\frac{1}{2}$  for foot. Wheeled vehicles must be man-handled across by at least 5 figures taking one complete period.

Fords are no obstacle. All streams are crossable unless otherwise stated.

Movement up or across a slope, through woods, through villages except along roads, or over boggy or broken ground, counts as 4 times the actual distance for mounted or wheeled troops, or twice normal distance for foot.

There is no bonus for moving along roads, except in so far that obstacles will not be met.

Mounted troops may not claim extra charge distance in woods, villages or marshy ground.

## MANOEUVRING

Changes of direction are carried out by wheeling one flank figure forwards or backwards, the opposite flank figure remaining stationary.

Changes of formation must not involve moving the unit standard which should remain in the centre of the unit.

After the change has been carried out, the unit may move, first deducting the distance moved by the figure with furthest to go while changing formation.

A unit may move up to 30 yards or 3" straight back, without turning round.

## UNCONTROLLED ADVANCE

This can only be initiated by a Reaction Test.

First period movement takes place at charge speed, second period movement at charge speed minus 30 yards.

The first period of any rout or pursuit immediately ensuing will then count as a second.

## MOVE DISTANCES

	Normal			Charge		
	60 yards or 6 "			160 yards or 16 "		
Super heavy cavalry ... ..	80	"	8 "	180	"	18 "
Heavy cavalry ... ..	80	"	8 "	200	"	20 "
Medium cavalry ... ..	160	"	16 "	240	"	24 "
Light cavalry ... ..	80	"	8 "	180	"	18 "
Chariots ... ..	80	"	8 "	180	"	18 "
Camels ... ..	40	"	4 "	60	"	6 "
Elephants ... ..	40	"	4 "	60	"	6 "
Heavy infantry ... ..	60	"	6 "	80	"	8 "
Medium infantry .. ..	80	"	8 "	100	"	10 "
Light infantry ... ..						
Light dart-throwing engines:						
Man-handled ... ..	40	"	4 "	(Terrain F. as Inf.) (As cavalry)		
Mule drawn ... ..	60	"	6 "			
Other engines, Ox-drawn ... ..	20	"	2 "			

## GENERAL

The result of firing are evaluated after all moving has been completed and before hand-hand commences, but the firing can be assumed to take place at any suitable time within the period.

## AMMUNITION SUPPLY

This is not taken into account. Initial issues and replenishment at unit level, together with salvaged enemy missiles are assumed to be sufficient.

## ARCS OF FIRE

Light horse archers, camel riders and elephant and chariot crews can fire all round.

Other light troops and light dart-throwing engines can fire within 45 degrees of straight ahead.

All other troops and engines can fire within 22½ degrees of straight ahead.

## RANGES

Hand-hurled weapons	...	...	...	...	...	...	...	...	...	30 yards or 3"
Mounted self (wooden) bows	...	...	...	...	...	...	...	...	...	60 " 6"
Mounted composite bows	...	...	...	...	...	...	...	...	...	90 " 9"
Slings	...	...	...	...	...	...	...	...	...	120 " 12"
Foot self bows	...	...	...	...	...	...	...	...	...	150 " 15"
Foot composite bows	...	...	...	...	...	...	...	...	...	180 " 18"
Staff-sling (Fundibulus)	...	...	...	...	...	...	...	...	...	180 " 18"
Crossbows. (Scorpion or Manbalista)	...	...	...	...	...	...	...	...	...	210 " 21"
Light dart-throwing engine	...	...	...	...	...	...	...	...	...	300 " 30"
Heavy dart or stone-thrower	...	...	...	...	...	...	...	...	...	360 " 36"

## FIRING ON THE MOVE

All troops except engines, staff-slings and crossbows can fire while moving forward but not while charging. Light horse archers, chariots and elephant crews can fire behind while retreating as well.

## FIRING OVERHEAD

All troops can fire over intervening troops at a lower level without penalty. In the same way, elephant crews can fire over cavalry but cavalry cannot fire over infantry. A contour block is higher than an elephant. Regular heavy or medium foot archers can fire over intervening troops on the same level, but not on to an engaged front rank in melee.

Maximum range is halved.

## CREW-SERVED WEAPONS

Elephants at long range shoot as 3 foot archers with self bows.

Chariots count as 1 composite bow horse archer if Asiatic, or 1 javelinman if Celtic.

Regardless of the actual size of their crew, which will normally be 2 figures for a light dart-thrower, and 4 for others, engines will have the same effect as 5 crossbow figures if dart-throwers or 3 if stone throwers. Stone throwers do not, however, have deductions when firing at enemy within cover.

For the purpose of return fire, casualties are computed as elephants, chariots, engines etc., not as individual crew members.

Elephants and chariots as targets are mentioned in the weapons factor table, engines have the same vulnerability as light infantry.

## WEAPON FACTORS

These are used in conjunction with tactical and random factors and the number of figures engaged, to calculate enemy casualties.

There is another set of weapon factors for hand-to-hand fighting

As the method of calculating casualties is the same in both instances, it is given elsewhere in the rules instead of duplicated.

Weapon factors for fire on various targets are as follows:

	SHC.	HC.	MC.	LC.	HI.	MI.	LI.	EI.	Ch.
Crossbows...	1	1	1	0	1	1	0	1	0
Darts, javelins, all slings and bows .	0	3	4	1	2	3	1	1	1

Missile (not hand held) units will observe the following target priorities —

1. Enemy advancing to engage them in close combat.
2. At least half their own number of missile men firing at them and within their own range.
3. Enemy attacking or firing on friendly troops they are directly ordered to support, or who form part of their own unit.
4. Any enemy missile men firing at them.
5. Advancing enemy.
6. Nearest enemy.

This modifies No. 5, Page 4 under 'ORDERS'

### **FIRE DURING A CHARGE**

Troops armed with missiles other than hand hurled weapons can shoot at an enemy charging from more than half his move distance away before evading or taking up hand-to-hand weapons.

Charging troops do not fire.

The effect of hand-hurled missiles during or immediately preceding close combat is included in hand-to-hand combat weapon factors.

Light troops with any figures more than 2 ranks deep count as Medium missile target.



## HAND-TO-HAND COMBAT

### FIGURES ELIGIBLE TO TAKE PART

1. Figures in base to base contact with an enemy to their front, or overlapping by one figure on the shielded side or 3 figures on the unshielded side, or overlapping super heavy cavalry by 2 on either side.
2. Regular heavy or medium infantry not engaged in firing and in a rank permitted to fight, and directly behind a figure eligible under 1.
3. Figures in base to base contact with enemy flank or rear after lapping round in a second period of fighting.

### WEAPON FACTORS

These again vary according to the weapon in use and the type of target.

	Ranks Fighting	SHC	HC	MC	LC	HI	MI	LI	El.	Ch.
Cavalry armed with Gothic lance or two-handed 12' Kontos, and with a sword or equivalent.	1	2	3	4	3	4	5	3	0	1
Cavalry armed with short spear and/or javelins, and with sword.	1	0	2	5	4	3	4	5	1	2
Cavalry armed with bow and sword.	1	0	1	2	3	1	2	4	1	1
Infantry armed with two-handed 18 ft. pike and sword.	4	1	2	3	0	2	3	1	1	2
Infantry armed with thrusting spear up to 12' long, as carried by Hoplites, and with sword.	1½	0	3	4	1	3	4	2	0	1
Roman and German close order infantry armed with pilum or other heavy throwing spear or Francisca, and with light javelins and sword.	1½	1	2	2	2	4	5	4	1	2
Celtic and open order infantry armed with light javelins and sword.	1	0	1	1	3	3	4	5	1	2
Infantry armed with two-handed axes or maces.	1	4	5	5	1	5	5	2	1	1
Slinger, archer, crossbowman or artillerist armed with sword or equivalent.	1	0	1	1	1	1	2	3	1	2
Elephant (per crewman including driver.)	1	2	2	3	1	3	4	2	1	3
Chariot ( " )	1	3	4	5	5	4	5	3	0	4

The number of ranks allowed to fight have been selected to encourage the use of tactical formations actually described in ancient military manuals.

Troops armed with two classes of weapon may choose to use either without any penalty, except under the reaction test rules.

Thrusting spears may be long (up to 12') or short (up to 7'). Only shafted weapon allowed to a foot archer is a short thrusting spear.

Elephants and chariots, like SHC, can be overlapped by 2 on each side. They themselves may overlap only 1 on each side.

Chariot drivers only count in charge, not in continuation.

Chariot and elephant crews other than drivers can fight to sides and rear as well as front.

## TACTICAL FACTORS

These are added to or subtracted from weapon factors for missile fire or hand-to-hand fighting.

Subtract 1 if:-

1. Regular close order archer unit with any of its figures delivering overhead fire on the flat.
2. Firing on or fighting an enemy in partial cover, except for stone-throwing engines.
3. Own troops are distracted or disorganised. (See below.)
4. Firing on troops which are moving at least 60 yards (6") during the period.
5. If own troops received 1 casualty per figure from fire during the current or previous period.

Add 1 if:-

1. Firing on or fighting cavalry or heavy infantry unable to use shields.
2. Own troops are charging, counter-charging or following up enemy.
3. Own troops are firing or fighting from higher ground than enemy.

Add 2 if:-

1. Firing on or fighting medium or light infantry unable to use shields.
2. Fighting hand-to-hand against super heavy cavalry caught in flank or rear.
3. Fighting hand to hand against chariots caught in flank, not rear.

## RANDOM FACTORS

These are added to the total of weapon factors and tactical factors.

If firing is taking place, throw one red dice counting minus and one black dice counting plus.

If the result is minus, subtract 1, if plus, add 1.

If regulars are fighting hand-to-hand, throw one red and one black probability dice numbered 2,3,3,4,4,5.

Red counts minus, black plus.

Add or subtract the whole of the result.

If barbarians are fighting hand-to-hand, the black dice used should have the normal numbering of 1,2,3,4,5,6, as they are less predictable.

Apart from this, the procedure is the same as for regulars.

If the General fights hand-to-hand with his troops, the unit he is with disregards any minus random factor. This is especially valuable for barbarian troops.

## DISORGANISATION AND DISTRACTION

This heading is used to cover those factors, physical and psychological, which temporarily affect a units efficiency. Recovery is automatic when all the possible causes are removed.

Penalties are only incurred up to twice, regardless of the number of causes.

Possible causes are:-

1. Cavalry within 30 yards (3") of camels or elephants if there are any in their own army, 60 yards (6") if they are completely unused to them.
2. An enemy behind units flank and within charging distance.
3. Engaged in pursuit or having pursued or been pursued during the previous period.
4. Cavalry whose charge was repulsed during the same or previous period.
5. All troops, except light infantry, whose moving was affected by a terrain factor during the current or last period.
6. Troops under fire from engines and moving less than 30 yards (3").
7. If own formation no longer presents a single unbroken front, including when it has been deliberately bent round an enemy flank.
8. If formation has been disrupted during current or last period by friendly troops other than light infantry passing through. (Note: The troops passing through are not necessarily disorganised).
9. Barbarians during any period during or preceeding which they have made any change in direction.
10. Troops being charged by elephants or chariots (Note:- This is additional to No. 1).
11. Medium or heavy infantry moving to attack cavalry.

## USE OF SHIELDS

Figures fired on or attacked from rear or unshielded flank, or with no shield at all, or simultaneously using a weapon requiring two hands such as Bow, Staff-sling, Crossbow, Kontos, Pike, or long-handled axes or mases, cannot use shields.

The only exceptions are fully armoured cavalry with armour for head, face, arms, hands, body, legs and feet, who do not need shields.

All troops except pikes and long spears are -1 against pikes or long thrusting spears.

12. Mounted troops whose moving was affected by a terrain factor during the current period.  
(Note – this additional to No. 5).
13. Troops whose movement during the current period was the second in succession out of control.
14. Chariots being charged by javelin armed cavalry or javelin armed light infantry.
15. “E” types who have seen an enemy and have not yet turned back a charge, or pushed back or broken an enemy.  
(Notes – Camels and elephants disorganise all horsed troops, not just cavalry. Charging chariots do not disorganise regular infantry who are carrying out specific orders for coping with them.



## CASUALTY CALCULATION

Having added the appropriate weapon factor, and tactical factors that apply, and the random factor, read down the column on the extreme left of the table below until you come to the equivalent number. Then read across until you come to the column corresponding to the number of your troops firing or fighting.

The box where row and column meet gives the number of enemy casualties in men.

Divide by 20, remove that number of figures, carry the remainder forward.

Total  
of  
Factors

### NUMBER OF OWN FIGURES

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
-5	0	0	0	0	0	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3
-4	0	0	0	0	1	1	1	1	2	2	2	2	2	2	3	3	3	3	4	4
-3	0	0	1	1	1	2	2	2	3	3	3	4	4	4	5	5	5	5	6	6
-2	0	1	2	2	2	3	3	3	4	4	4	5	5	6	6	6	7	7	8	8
-1	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10
0	1	1	2	3	3	4	4	5	6	6	7	7	8	9	9	10	10	11	12	12
1	1	2	2	3	4	5	6	6	7	8	9	10	10	11	12	13	14	14	15	16
2	1	3	4	5	6	8	9	10	11	13	14	16	17	18	19	21	22	23	24	26
3	2	3	5	6	8	9	11	13	14	16	18	19	21	22	24	25	27	29	30	32
4	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
5	3	5	8	10	13	15	18	20	23	25	28	30	33	35	38	40	43	45	48	50
6	3	6	9	13	16	19	22	25	28	32	35	38	41	45	48	51	54	57	60	64
7	4	8	12	16	20	24	28	32	36	40	44	48	52	56	60	64	68	72	76	80
8	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
9	6	13	19	25	32	38	44	50	57	63	69	76	82	88	95	101	108	114	120	126
10	8	16	24	32	40	48	56	64	72	80	88	96	104	112	120	128	136	144	152	160
11	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200
12	13	25	38	50	63	76	88	101	114	126	139	151	164	176	189	207	214	227	240	252

If number of figures involved exceeds 20, read chart in multiples of 10+ remainder, i.e. 32 figures at factor of 3 is  $3 \times 16 + 3 = 51$ .

#### Example:

10 slingers exchanging fire with horse archers galloping past their front.

Slingers weapon factor against light cavalry is 1.

Tactical factors are - 1 because cavalry are moving more than 60 yards, +1 because horse archers cannot use shields while firing.

Red dice scores 3, black dice 5, Black is higher, so add 1.

Total of factors is 2.

10 men firing with factor of 2 cause 13 casualties.

No figures removed, carry 13 casualties forward.

## AFTER HAND-TO-HAND FIGHTING

If the fighting was between attacking cavalry, camelry or chariots and standing infantry, infantry with higher casualties and at least one per figure in the unit, will break.

If the infantry do not break, the cavalry will rally 100 yards (10") back next period.

If the fighting did not include standing infantry, the side with twice its opponents casualties and at least one per figure will break.

If neither side has broken after 3 periods fighting, both will rally 50 yards (5") back next period.

If the fighting included no troops other than infantry or elephants, the side with higher casualties and at least one per figure is pushed back 30 yards (3"), its opponents following up.

An A or B unit pushed back 4, a C unit 3, or a D or E unit 2 periods in succession will break.

If, when a unit breaks, it cannot immediately run (e.g. surrounded, or backing an impassable obstacle) half the unit will surrender, and the other half will be assumed to break out and be pursued as in Rout and Pursuit below. If the General is involved, he will surrender if his personal figure has had 10 or more losses.

## ROUT AND PURSUIT

### BROKEN TROOPS

These will be run with their backs to the enemy until met by their General, or until they have passed or been passed by fresh troops, or until they outdistance pursuit.

They travel at charge speed where this is possible, minus 20 yards (2") for the first and each subsequent period.

They go straight back at 90 degrees to their front.

If they meet an impassable obstacle they will swerve round it, losing 50 yards (5") from their remaining move.

If they meet friendly troops, they will swerve as if for an impassable obstacle towards any gap at least 3 figures wide and within 50 yards (5") of the swerving point.

If no such gap exists, they will burst directly through the other unit, disorganising it, unless the routed troops are light infantry. Barbarian troops burst through in this manner will be swept away and join the rout.

### PURSUERS

These will follow the routed at charge speed, minus 30 yards (3") for the first and each subsequent period.

They will strike without receiving return blows, at the moment the enemy turn their backs, and at the end of any period if they are still in contact.

They may therefore strike twice during the first pursuit period.

They will cease pursuit when the routed rally for any of the reasons given above, or when they themselves come to any obstacle. They will then rally back next period 100 yds. or 10" from furthest point reached if mounted, or 30 yds. if elephants or foot.

## BREAKING OFF FROM CLOSE COMBAT

Troops engaged in hand-to-hand fighting can break off and retire.

They will receive blows without reply as they turn, and must immediately outdistance pursuit or be treated as routed.

## TROOPS LEAVING THE FIELD

Troops who leave the table for any reason will reappear at the same point if at the beginning of any of the next three periods a 3 or 4 is thrown, using a probability dice for regulars or normal dice for barbarians.

4 Indicates an immediate return.

If the score is 3, throw the same dice again, the score indicating this time the number of periods delay before the force, which is assumed to be visible in the distance, returns.

Troops pursued off the table will not return.

## RISK TO THE GENERAL.

The figure representing the General and his 19 inner bodyguards must take a proportional share of casualties when fighting hand-to-hand or under fire.

The General is assumed to be the last of the 20 to fall, his devoted companions protecting him at the sacrifice of their own lives!

Fire can be concentrated on this figure only if it is more than 50 yards (5") from one of its own units.

Light cavalry will not break steady heavy or medium infantry. The infantry must first be disorganised.

Where a unit more than 40 figures strong is engaged hand-to-hand with two or more enemy units simultaneously, casualties in men per figure caused by each hostile unit will be based on the respective frontages counting in contact with each unit and the depth of each frontage.

In this way, it is possible for part of a large unit to be broken while the rest remains in combat.

Missile casualties on troops in melee count towards 1 per figure, but not in deciding total casualty advantage.

Routing cavalry may try to break through lighter enemy cavalry or light infantry they meet. In this case the normal reaction or evade sequence will be carried out by the troops barring the way. Heavy or medium infantry facing the routed cavalry will be treated as an impassable obstacle. Routing Super heavy cavalry may try to ride down all in their path except facing pikes. Chariots count as Medium cavalry.

Routing infantry may try to break through any enemy infantry of lighter type except facing pikes. The normal reaction and evade sequence is carried out by the troops barring the way. Routing infantry will treat cavalry in their way as an impassable obstacle.

If pursuers wish to charge through troops that others have routed through, both sides test Reaction as for charge. If the intervening troops break immediately or after a single period of combat, then those originally pursued will not rally at that time.

## APPENDIX I.

### FORMING AN ANCIENT ARMY

These rules favour the General who acts offensively, seizes valuable terrain features, uses a wide-ranging screen of light troops to cover his deployment and embarrass his opponents, who believes in closing with his enemy to obtain a decision, and who keeps a strong reserve under his hand to exploit opportunities and redeem failure.

This calls for intelligent selection and combination of types of troops.

Since some players may be taking part in ancient wargames for the first time, here is a quick and very rough guide to selecting an army.

For the General whose forces are to be formed round the Airfix legionary, a medium infantryman armed with the pilum.

Between a third and a quarter of your army should be cavalry.

It can be in metal armour, scale or mail, or in leather jerkins.

It can be armed in conventional style with short spear or javelin, or mainly with the bow.

We recommend relatively few mounted archers, all open order skirmishers.

If you expect your opponents to rely on horse archers, light horse with javelins boldly used are a good answer.

If they are likely to be Gothic lancers, then you should emphasise armoured heavy cavalry, and keep your infantry formation solid.

Between a quarter and a half of your infantry should be light spearmen or slingers in open order, or archers.

Archers are best in close formations, firing over the heads of the legionaries from behind. The Airfix Roman archer is best painted as if his scales are leather.

The light troops can skirmish in front of the legionaries, then retire through their ranks as the enemy approaches.

To convert your Airfix legionaries to the later type with metal armour may pay if your opponent emphasises archers.

If he doesn't, you may be sacrificing too much in numbers and mobility.

If you do use metal armour, paint the archer with bronze scales to go with him.

As regards formations, there is a lot to be said for the traditional style with cavalry on the wings, and infantry in a solid block in the centre with no gaps between units, but you *must* keep a strong reserve in hand.

If your forces are formed around the Ancient Briton set, well, under these rules you could make a worse choice.

Try to keep your units large, and supplement the chariots with light horsemen. The slingers will be valuable, but do not rely on a long range fire fight.

Try to arrange a mass downhill charge led by the General in one screaming rush.

Under these rules, it will be very hard to stop.

You are not likely to find yourself short of troops, so avoid defiles that stop you bringing your numbers to bear.

Other possibilities are Asiatic armies with camels and elephants, or barbaric German ones based on infantry or charging cavalry.

To be successful, the Asiatic army will need a very high proportion of cavalry, who, together with the infantry, should nearly all be archers.

Their best tactics are to envelope the flanks by destroying the cavalry screen, then overwhelm the infantry with arrows and charges from the rear. However, this takes time to do.

Gothic lancers are very hard to beat, but have an unfortunate tendency to charge without orders which can be embarrassing.



Having selected your army, you have to paint it, so a few tips here are desirable.

The best lasting dye in the ancient world was madder, giving a dullish red. Wool was often left its natural colour or banded with strips of red. It ranges from white to light brown.

Leather armour is always shown in Roman paintings as a light yellow-brown. Leather for belts, scabbards, harness is mostly dyed maroon. Ordinary leather tunics were red-brown.

Shields in the Roman army were painted in bright geometrical patterns of three or four colours, each unit its own pattern. The back could be one of these colours or pink undercoat. The boss was of bronze, and the edges bound with red leather, not metal. The pattern was painted, not bit of metal stuck on.

Humbrol flesh colour is improved by mixing in a little red.  
British flesh should be striped with medium blue woad.

British shields owned by chieftans and noble warriors were of polished bronze decorated with coloured enamel.

One tribe, the Brigantes, painted their cheaper wooden shields blue.  
Clothing was brightly coloured, with much use of checks and stripes.

Celts should be red haired, blond or dark.  
Germans mainly blond, shaggy and slightly smelly, and in dull colours, navy blue being very popular.  
Some German tribes fighting on foot painted their shields white, but otherwise fancy patterns with severed heads, dragons, horses were fashionable.  
Of course, they made no pretence to uniformity.

Spearshafts should be a pale yellow-grey, almost an off-white.  
The pilum is metal from the point, as far as, but not including, the hand guard.

Horses should really be mixed in colours, except that black was considered unlucky.  
The commonest was bay, which is red-brown, with black mane, tail and lower leg.  
The next chestnut, usually red-brown all over.  
Then grey, which could be the same all over or with black markings like bay.  
Any of these would normally have white markings on the forehead of variable size, and one or more white feet.

Metal armour can be difficult. For iron helmets and segmented cuirasse strips, and metal part of pilum shaft, use tank track metallic grey. Scale armour is best as bronze, but officers and cavalry might have it silvered.

A thin wash of black makes the scales stand out better.  
Weapon points and blades should be silver.

With the exception of the British chariot, which apart from its leather floor and wicker sides was highly decorated, wheeled vehicles should be a rather dirtier shade than spear shafts.

Now that the troops are painted, they must be organised.  
Most Roman cohorts and alae had a full strength of 480 men, though some were double the size.  
However, they were usually considerably under strength.  
Barbarian units varied greatly, being the personal following of a petty chief. Under these rules it pays to have them large.

So make regular units about 20 strong, including an officer and a standard bearer figure, all in uniform costume though not necessarily all with the same weapons.

Barbarians should be mixed in position, weapon, costume and colour, but still require a commander and standard.

How about a Roman head on a spear?



## WARGAMES FIGURES

## Figures

The cheapest and most readily available figures are the Airfix plastic series, containing between 20 and 40 figures. Two sets can be used as supplied, the Romans and Ancient Britons. In addition, the Robin Hood and Arab sets can be used with little adaptation, while U.S. Cavalry, Red Indian, Tarzan and Sheriff of Nottingham sets can be used as the basis of conversions to provide practically any type of warrior figure of the Ancient world.

Some of the foot figures can be taken off their bases and made into cavalry, other cavalry can be made from the top half of a foot figure pinned and glued to the lower half of a cavalryman. Spears from thin wire, javelins from pins, and shields from card or plastic can be added to Robin Hood figures to make a variety of auxiliary and barbarian types. War elephants can be made from the Britains baby elephant, or the Airfix Zoo set Elephant with a howdah from card or plastic sheet, and a crew from converted figures from the Roman set. Cloaks and other parts of dress can be fashioned from Plasticine or similar modelling compound, set with varnish. Articles on conversion of figures appear regularly in Airfix Magazine, and in Slingshot, the journal of the Society of Ancients.

A number of firms can supply metal cast figures of good quality and in a wide range of types. These figures are obviously much more expensive than the plastic type, but have the advantage that they may cover types that would have to be converted if made from Airfix figures as a basis. Many wargamers mix plastic and metal figures at will, there are slight differences in scale, but not enough to destroy the effect on the table. The "20" mm scale which is usually referred to is taken as a scale of 4 mm to the foot — Some of the metal figures are slightly over this scale, while Airfix figures vary a little on either side.

Two firms in the U.K. should be mentioned —

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757, Pershore Road, Selly Park, Birmingham 29.

# THIS IS INTENDED AS A QUICK REFERENCE AND CALCULATION SHEET FOR PLAYERS

## ALREADY FAMILIAR WITH THE FULL RULES

TEST REACTION AT		+ 1	- 1
PLAYERS DISCRETION		EACH FRIEND UNIT NEAR	EACH ENEMY UNIT NEAR
FIRST TIME FIRED OR IN CHARGE REACH		MORE FRIENDS IN SIGHT	MORE ENEMY IN SIGHT
CHARGED OR CHARGING		FRIENDS ADVANCING	ENEMY CAVALRY, EL. OR CH.
FRIENDS BREAKING		FRIENDS CHARGING	ENEMY ADVANCING
LOSING 2 MEN PER FIG. TO FIRE		ENEMY RETIRING	FIRE BY 10 FIGS.
FALLING BELOW 50 %		FLANK OR REAR TEMPTS	ENEMY TO FLANK
PREVENT OWN INF. PURSUIT		ENEMY DOWNHILL	ENEMY UPHILL
SURPRISE SIGHTING			FRIENDS RETIRING
		REAR SUPPORTED	DISORGANISED
		FRIENDLY COVER	EACH 1/6 LOST
			RETIRING
			SURPRISE SIGHTING
			BOW ARMED    SHIELDLESS
REACTION SCORE = 3 DICE ± EXTRAS			
REGULARS 233445. BARBS.123456.		EACH SECURE FLANK ± 1	
GENERAL WITH ± 3			- 2
GENERAL NEAR ± 1		+ 2	ENEMY IN REAR
IN COVER ± 2		EACH ENEMY UNIT IN ROUT	EACH FRIENDLY UNIT IN ROUT
IN SQUARE ± 2			UNFRIENDLY COVER

REACTION CLASSIFICATIONS		REACTION IF SUBJECT TO CURRENT ORDER					REACTION IF NO CURRENT ORDER						
		A	B	C	D	E	A	B	C	D	E		
A	REGULAR GUARDS	-2	-1	1	2	3	BREAK IF UNDER FIRE OR CHARGE - OTHERWISE RETREAT 3 PERIODS	-2	-1	1	2	3	← AS ACROSS
B	ELITE REGULARS (INCL LEG). BARBARIAN BODYGUARDS	-1	0	2	3	4	RETIRE DISORGANISED BUT TURN IF ATTACKED - 2 PERIODS	-1	0	2	3	4	IF PURSUING, HALT 1 PERIOD. IF HALTED, RETIRE 2 PERIODS
C	OTHER REGULARS (INCL AUX) AND MERCENARIES	3	3	4	5	6	HALT 2 PERIODS	4	5	6	7	9	MOVE TOWARDS FRIENDS, COVER OR HILL - 2 PERIODS
D	FIGHTING BARBARIANS	4	5	6	7	9	CARRY ON WITH ORDER OR TAKE OTHER OPTIONAL ACTION	8	9	10	11	12	MOVE TOWARDS ENEMY - 2 PERIODS
E	UNENTHUSIASTIC PEASANT LEVIES	14	14	14	13	13	ACT AS GENERAL WISHES	13	13	14	14	14	← AS ACROSS
		16	15	15				15	15	15			
		17	16	16	14	14	UNCONTROLLED ADVANCE - 2P.	16	16	16	15	15	← AS ACROSS

	FIG. FRONT	REG. POINTS VALUE	BARB POINTS VALUE	NORM MOVE	CHARGE	EVAS	MISSILE FIRE	RANGE	CAUSES OF DISTRACTION OR DISORGANISATION
C IN C	?	100	100	?	?	?	HAND HURLED	3"	HORSES NEAR EL OR CAMELS
ELEPHANT	1 1/2"		25	4"	6"	-	MOUNTED SELF-BOW	6"	OUTFLANKED
HY ENGINE	1 1/2"	25	-	2"	-	-	MOUNTED COMP. BOW	9"	PURSUED OR PURSUING
CHARIOT	1 1/2"	-	15	8"	18"	10"	SLING	12"	REPULSED CAVALRY
LT. ENG.	1 1/2"	15	-	4"	-	-	FOOT SELF-BOW	15"	PASSING OBSTACLES
" (MULES)	1 1/2"	15	-	6"	-	-	FOOT COMPOSITE BOW	18"	ENGINE FIRE
S-HV CAV.	2 1/2"	12	15	6"	16"	-	STAFF SLING	18"	FORMATION DISPENSED WITH
HV. CAV.	2 1/2"	10	12	8"	18"	-	CROSSBOW	21"	BROKEN TROOPS
MED. CAV.	2 1/2"	8	6	8"	20"	-	LIGHT ENGINES	30"	BARBARIANS TURNING
LT. CAV.	1 1/2"	8	6	16"	24"	10"	HEAVY ENGINES	36"	CHARIOTS CHARGED BY JAVS.
HV. INF.	1 1/2"	6	8	4"	6"	-			CHARGED BY EL. OR CHARIOT
MED INF.	1 1/2"	4	3	6"	8"	-			INFANTRY CHARGING CAVALRY.
LT. INF.	2 1/2"	4	3	8"	10"	10"			CAVALRY ON TERRAIN
SUB GEN.	?	50	50	?	?	?			2nd PERIOD OUT OF CONTROL
ASSYR. CHAR.	1 1/2"	25	-	8"	18"	10"			E TYPES SEEING ENEMY

# WEAPON FACTORS

SITUATION	WEAPONS.	USED AGAINST	SHC	HC	MC	LC	HJ	MI	LI	EI	CH
DISTANT.	DARTS, JAVELINS, SLINGS, STAFF SLINGS, BOWS.	?	0	3	4	1	2	3	1	1	1
	CROSSBOWS, ENGINES. (DART COUNT AS 5 MEN, STONE 3)	?	1	1	1	0	1	1	0	1	0
CAVALRY HAND-TO - HAND	ROMAN OR EASTERN KONTOS, GOTHIC LANCE	x1	2	3	4	3	4	5	3	0	1
	CONVENTIONAL SPEAR AND JAVELIN CAVALRY	x1	0	2	5	4	3	4	5	1	2
	BOW AND SWORD	x1	0	1	2	3	1	2	4	1	1
INFANTRY HAND-TO - HAND	TWO-HANDED PIKE	x4	1	2	3	0	2	3	1	1	2
	THRUSTING SPEAR	x1 <sup>1</sup> / <sub>2</sub>	0	3	4	1	3	4	2	0	1
	PILUM OR EQUIVALENT, JAVELIN AND SWORD	x1 <sup>1</sup> / <sub>2</sub>	1	2	2	2	4	5	4	1	2
	JAVELINS AND SWORD.	x1	0	1	1	3	3	4	5	1	2
	TWO-HANDED AXE OR MACE	x1	4	5	5	1	5	5	2	1	1
	SLINGER, ARCHER, CROSSBOW MAN OR ARTILLERIST WITH SWORD	x1	0	1	1	1	1	2	3	1	2
SPECIAL HAND-TO-HAND	ELEPHANT (PER CREW MEMBER INCLUDING DRIVER)	x1	2	2	3	1	3	4	2	1	3
	CHARIOT (PER CREW MEMBER, BUT DRIVER DURING CHARGE ONLY)	x1	3	4	5	5	4	5	3	0	4

## TACTICAL FACTORS

## RANDOM FACTORS.

DOUBLE DISTRACTED OR DISORGANISED	-2	FIRING	RED DICE MINUS. BLACK PLUS ADD OR SUBTRACT ONE	
DISTRACTED OR DISORGANISED	-1			
OVERHEAD FIRE ON FLAT		FIGHTING PIKES L/SPEARS	REGULARS FIGHTING	RED AND BLACK 233445 DICE ADD OR SUBTRACT DIFFERENCE.
ENEMY IN COVER (NOT STONE-THROWERS)				
MISSILE TARGET MOVING 6"		+1	BARBARIANS FIGHTING	AS REGULARS, BUT BLACK DICE 12 34 56
1 CASUALTY PER FIGURE FROM MISSILES				
SHIELDLESS CAVALRY OR HEAVY INFANTRY	GENERAL FIGHTING		DISREGARD A MINUS TOTAL.	
CHARGING OR FOLLOWING UP				
HIGHER GROUND	+2			
SHIELDLESS MIOR LI		SHC & CH. FLANKED		

TOTAL OF FACTORS	NUMBER OF OWN FIGURES																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
-5	0	0	0	0	0	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3
-4	0	0	0	0	1	1	1	1	2	2	2	2	2	2	3	3	3	3	4	4
-3	0	0	1	1	1	2	2	2	3	3	3	4	4	4	5	5	5	5	6	6
-2	0	1	2	2	2	3	3	3	4	4	4	5	5	6	6	6	7	7	8	8
-1	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10
0	1	1	2	3	3	4	4	5	6	6	7	7	8	9	9	10	10	11	12	12
1	1	2	2	3	4	5	6	6	7	8	9	10	10	11	12	13	14	14	15	16
2	1	3	4	5	6	8	9	10	11	13	14	16	17	18	19	21	22	23	24	26
3	2	3	5	6	8	9	11	13	14	16	18	19	21	22	24	25	27	29	30	32
4	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
5	3	5	8	10	13	15	18	20	23	25	28	30	33	35	38	40	43	45	48	50
6	3	6	9	13	16	19	22	25	28	32	35	38	41	45	48	51	54	57	60	64
7	4	8	12	16	20	24	28	32	36	40	44	48	52	56	60	64	68	72	76	80
8	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
9	6	13	19	25	32	38	44	50	57	63	69	76	82	88	95	101	108	114	120	126
10	8	16	24	32	40	48	56	64	72	80	88	96	104	112	120	128	136	144	152	160
11	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200
12	13	25	38	50	63	76	88	101	114	126	139	151	164	176	189	202	214	227	240	252