

## Morale

Unit Morale Loss Chart	
Unit Size	Morale Loss
1-19 Figures	-1 morale for each 2 casualties
20-24 Figures	-1 morale for each 3 casualties
24+ Figures	-1 morale for each 4 casualties

Unit Morale Modifiers Chart	
Unit Status	Modifier
Disorganised	-1
Each 2/3/4 figures lost	-1
Terrain i.e. woods, town, works	+1
Attached General	+1
Formed unit charged by unit in skirmish	+1
Charging flanks	+1
Charging rear	+2

Independent Action Chart	
Formation	Dice Result
Cavalry, mounted artillery, horse artillery, elephants and camels	1-4
Infantry and all other artillery	1-2

## Moving

Infantry Operational Allowance Chart			
Unit	M&V	C&R	EXP
All infantry in column/assault column	1+1"(2.5cm)	1	1+1"(2.5cm)
Formed infantry in line	1	1	1
Infantry in square	1 or 1" move	1	1
Formed infantry with cadence step	2	1	1 or 2
Formed light infantry in line	1+1"(2.5cm)	1	1+1"(2.5cm)
Formed infantry with close order drill	1+2"(5cm)	1	1+2"(5cm)
Infantry in skirmish formation	2	1 or 2	2

Cavalry Operational Allowance Chart			
Unit	M&V	C&R	EXP
All formed cavalry/elephants in line	2	1	2
All cavalry/camels in skirmish formation	3	1 (evade 2)	2
All cavalry/elephants/ in column	2+1"(2.5cm)/op	1	2+1"(2.5cm)/op
All cavalry/elephants/ in cavalry column	2+1"(2.5cm)/op	1	2+1"(2.5cm)/op
Irregular cavalry/camels in column	2	1	2

Artillery Operational Allowance Chart			
Unit	M&V	C&R	EXP
Light, howitzer, tiger, zanbaruck, schuvalov, sha'tumal, heavy artillery and swivel guns	1+1" (2.5cm)	1	-
Mortars, heavy howitzers, oriental heavy artillery, siege mortars, siege artillery	1	1	-
Horse and mounted artillery	2	1 or 2 (Evade)	2 (Evade)

## Melee

Melee Calculations Chart	
Unit Status	Modifier
<b>Average Unit Melee Modifiers</b>	
<b>Units Starting Morale</b>	
Charging flank or rear	x2
Elephants charging in line in the open	+4
Heavy cavalry charging in line in the open	+3
Elephant mounted artillery being charged by cavalry or camels	+2
Medium cavalry charging in line in the open	+2
Camels v cavalry (not other camels or elephants)	+1
Camel mounted artillery being charged by cavalry (not camels or elephants)	+1
Light cavalry charging in line in the open	+1
Disorganised	-1
Cavalry charging uncontrolled	-1
Unit losses for each 2/3/4 figures lost	-1
Terrain modifiers, see terrain chart pg 48	+/-
Special unit modifiers	+/-
Calculate above for all units in the melee and divide by the number of units	
<b>Supplementary Melee Multipliers</b>	
Every 3 additional figures largest unit compared to largest unit	+1
Attached general	+1
Roll 1D6 for each unit in melee	

Breaking The Bayonets Chart	
Target Unit Type	Dice Result
Any formed oriental infantry	3+
Formed infantry in line	4+
Formed infantry in any column	5+
Formed infantry in square	6
* Add +1 if both flanks are secured. The maximum roll required to break the bayonets is 6.	

Uncontrolled Charge Chart	
Dice Roll	Result
1-4	No effect
5-6	Uncontrolled

Fallen General Chart		
Action	Dice Roll	Result
Melee	10-12	Remove General
Shooting	10-12	Remove General



### Dice in Melee Chart

Your Unit		Infantry						Cavalry				Artillery	
Type	Formation	Line	Assault Column	Column	Skirmish	Tribal & Braves	Square	Line	Cavalry Column	Column	Skirmish	Unlimbered	Limbered
Infantry	Line	D6	D6	D6	D6	D6	D6	D6	D6	D6	D6	D6	D6
	Assault Column	D3	D3	D3	D3	D3	D3	D6	D6	D6	D6	D6	D6
	Column	-	-	-	-	-	-	D6	D6	D6	D6	D6	D6
	Skirmish	-	-	-	-	-	-	-	-	-	-	-	-
	Tribal & Braves	D3	D3	D3	D3	D3	D3	D3	D3	D3	D3	D3	D3
	Square	-	-	-	-	D3	-	N/A	D6	D6	D6	D6	N/A
Cavalry	Line	D6	D6	D6	D6	D6	D6	D6	D6	D6	D6	D6	D6
	Cavalry Column	D6	D6	D6	D6	D6	D6	D6	D6	D6	D6	D6	D6
	Column	-	-	-	D6	-	-	-	-	-	-	-	-
	Skirmish	-	-	-	-	-	-	-	-	-	-	-	-
Artillery	Unlimbered	D6	D6	D6	D6	D6	D6	D6	D6	D6	D6	D6	D6
	Limbered	-	-	-	-	-	-	-	-	-	-	-	-

## Shooting

Artillery Weapons Range Chart	
Weapon	Range
Ball Shot or Shell	
Swivel, sha'turnal, zanbarucks, camel, tiger guns	9" (23cm)
Light guns, horse guns and howitzers	10" (25.5cm)
Medium guns and shouvalovs	12" (30.5cm)
Heavy guns and mortars	14" (35.5cm)
Siege guns and heavy howitzers	16" (40.5cm)
Siege mortars	18" (45.5cm)
Canister Rounds	
Tiger guns, howitzers, heavy howitzers, horse guns, shouvalovs	3.5" (9cm)
Light artillery	4.5" (11.5cm)
Medium and heavy guns and siege guns	6.0" (15cm)
Swivel guns, zanburacks, sha'turnal, mortars and siege mortars cannot fire canister.	

Artillery Shooting Characteristics Chart	
Characteristic	Dice/Figure
Ball Shot or Shell	
Camel, zanbarucks, elephant, swivel guns, sha'turnal guns	2
All other guns	1
Canister Rounds	
Horse, light, tiger guns	2
Medium, heavy guns	3
Siege guns, howitzers, shouvalovs	4

Formed Infantry Shooting Modifiers Chart	
Target	To Hit (D6)
Unlimbered artillery	6
Infantry in skirmish formation	6
Units in cover	6
Units in line formation	5+
Limbered/mounted artillery	5+
Any other target	5+
* Infantry in skirmish formation receive a +1 to hit bonus when shooting. Therefore, a unit in line would be hit on a 4+, not 5+.	
* Formed infantry in line at least 5 figures strong shooting at large targets; add 1 extra D6 per unit to the total amount they are allowed by the dice/figure ratio. Therefore, a 12 figure unit firing at a large target would receive 7 dice, not the usual 6 dice.	
* Large targets are defined as infantry columns, tribal columns, assault columns, squares, formed cavalry, camels and elephants in any formation, and the flanks or rear of any unit. Note: modifiers are cumulative. A formed unit in line firing on the flank of a formed cavalry unit would receive 2 extra D6 for shooting.	
* Disordered units lose a dice when shooting.	

Artillery Dead Zone Chart	
Type of Artillery	Dead Zone
Tiger guns, howitzers, schuvalovs and heavy howitzers	3.5" (9.0cm) - 5" (12.5cm)
The above artillery pieces fire canister from 0" (0cm) up to 3.5" (9.0cm), cannot fire at any target in the dead zone and fire shell from 5.0" (12.5cm) out to the maximum range of the artillery battery.	
Mortars	0" (0.0cm) - 5" (20.5cm)
Mortars cannot fire at any target in the dead zone and fire shell from 5" (20.5cm) out to the maximum range of the mortar.	
Siege mortars	0" (0.0cm) - 8" (20.5cm)
Siege mortars cannot fire at any target in the dead zone and fire shell from 8.0" (20.5cm) out to the maximum range of the siege mortar	

Infantry Shooting Characteristics Chart	
Characteristic	Dice/Figure
Cannot shoot	0
Poor shot	1/4
Average shot	1/3
Skirmish shot	1/3
Good shot	1/2

Infantry Weapons Range Chart	
Weapon	Range
Short bows & javelin	2" (5cm)
Muskets	3" (7.5cm)
Rifles, bows	4.5" (11.5cm)

Artillery Shooting Modifiers Chart	
Target	To Hit (D6)
Ball Shot or Shell	
Unlimbered artillery	6
Unit in skirmish formation	6
Unit in line formation	5+
Limbered artillery/mounted artillery	5+
Tribal columns, carts	4+
Infantry unit in any other column	3+
Mounted cavalry/cavalry column	2+
Infantry unit in square	2+

Canister Round	
Target	To Hit (D6)
Unlimbered artillery	5+
Infantry in skirmish formation	5+
Units in line formation	4+
Limbered artillery/mounted artillery	4+
Tribal column, carts	3+
Infantry in any other column	2+
Mounted column/cavalry column	2+
Infantry unit in square	2+

- \* Shooting at or into cover is +1 to the hit value.
- \* Shooting on the flanks or rear of any formation other than square or unlimbered artillery is -1 to the hit value.
- \* Mortars and siege mortars cannot fire canister.
- \* Regardless of modifiers any 6's rolled will always hit and any 1's rolled will always miss.
- \* Indirect fire at targets with no LOS +1 to hit.