Sparta War of Empires

Persian Position Calculation Guide

This guide is for the Sparta – War of Empires Persian Positions spreadsheet which can be used to farm Persian positions using the resource/bank calculation as described in Jeff Maginniss' Solving Soldier's Inc. - A Method for Farming Search & Destroy Missions guide dated 3-20-14. It also contains calculations for troop strength and resource and production time calculation for Spartan units.

Resource Bank Method for Persian Positions

The basic theory of the Resource Bank Method is that when you receive a reward (new troops) from the Persian Positions you are setting a "bank" of resource values. The bank is equal to the total number of resources (timber, bronze and grain) required to build the units received plus any additional resources received. You will receive your next reward when you "pay" back the bank plus interest. The amount paid back equals the resource value (timber, bronze and grain) required to build the troops lost while attacking or defending positions. Every time you receive a reward payout of troops the bank is reset and your next payout should occur when you pay back the bank plus interest.

This spreadsheet assumes a 10% interest value, but due to game variability you may see payouts below or above that value. Be careful not to stretch yourself too thin; always have troops in reserve in case a payout is not received when expected. If a payout is not received when expected, you should go to the lowest position available in order to minimize losses and start rebuilding.

As stated previously, this is not an exact method and payouts may not occur when expected. It is also recommended you have some partially completed or lower-level positions available that can be completed quickly in case you do not receive a payout when expected.

The methods in this spreadsheet focus primarily on efficiency, by attempting to complete the positions with the minimum amount of troop losses. If necessary, the information can also be used to determine when it is necessary to burn a certain amount of a unit type in order to complete a payout.

General Tips for Persian Positions

1) Always build troops. You will quickly fall behind paying back interest if you do not have new units ready. You do not have to pay back the same unit type; but, as an example, if you win 100 Agema Horsemen, you will most likely need to lose 110 Agema Horsemen before you receive your next reward.
2) Always scout the positions– 1 javelineer for defensive positions and 1 – 2k offense for offensive positions. Usually, 1 offensive cavalry or phalanx unit is enough. More detail on scouting is covered below. Using the tools in this spreadsheet you can minimize your losses by properly analyzing the scouting report.
3) It is preferred to slowly move up the levels. Try to keep within 5 levels above your last reward and avoid going down levels if possible. In general, the rewards increase as the level increases.
4) It is good to have a nice mix of troops. It is frustrating to be stuck with only cavalry with only cavalry heavy offensive positions.
5) Always make sure you are sending offensive troops to an offensive position (red positions) and defensive troops to a defensive position (green positions)
6) Avoid payouts on levels that reward scrolls (highest off/def available). This takes away from your payout.
7) Use Elixirs to boost your offensive or defensive strength while completing the positions.
8) Take your time and complete one position at a time. Always be aware of what you need to complete the payout and try to plan several positions ahead. Mistakes will occur if you hurry.
9) If results don't go as expected, which will happen occasionally, take a break and analyze what you can do best to get back on track.

Calculating the Bank, Interest, and Payout

The value of the bank is equal to the total resource value of the units received as a payout plus the total value of any resources received. The tables below summarize the resource value of the units you can receive as a payout.

Offense

Unit	Timber	Bronze	Grain	Total
Swordsman	90	150	60	**300**
Hoplite	100	270	150	**520**
Myrmidon	650	1080	436	**2166**
S Hoplite	720	1800	1000	**3520**
Sarissophoros	2370	3953	1500	**7823**
S Promachos	2175	5435	3000	**10610**
M Cavalry	5700	9500	3800	**19000**
A Horseman	5000	12277	7000	**24277**

Defense

Unit	Timber	Bronze	Grain	Total
Javelineer	75	30	15	**120**
Psilos	90	60	42	**192**
Peltast	880	350	530	**1760**
C Archer	950	570	380	**1900**
Thureophoros	2500	1000	1500	**5000**
T Thorakites	2700	1600	1000	**5300**
Scout	450	450	600	**1500**
M Peltast	3700	1500	2300	**7500**

To calculate the bank add together the number of offensive troops received multiplied by the total resource value of that unit; the number of defensive troops received multiplied by the total resource value of that unit; and the total of all resources received.

Examples

Defense Lvl 16 payout is: 5 A. Horsemen, 31 M Peltast and 100 each timber, grain, and bronze.

Bank is: 5(24,277) + 31(7,500) + 100 + 100 + 100 = 354,185

Offense Lv26 payout is: 36 M Cavalry and 8 M Peltast with no resources

Bank is: 36(19,000) + 8(7,500) = 744,000

Defense Lvl 36 payout is: 356 Trojan Thorakites, 18,361 timber, 15,847 bronze, and 25,075 grain

Bank is: 356(5,300) + 18,361 + 15,487 + 25,075 = 1,946,083

Interest

Now that you have calculated the bank from your last reward add 10% to the bank for interest. For the examples above the interest calculation and total value to repay is:

354,185 + 354,185(0.10) = 389,604

744,000 + 744,000(0.10) = 818,400

1,946,083 + 1,946,083(0.10) = 2,140,692

Payout

In theory, you should receive a payout when the resource value of the troops that you lose while attacking or defending the positions is equal to or greater than the bank+interest (payout) value. You can mix offensive and defensive positions and all troops lost count toward paying back the bank. Losses incurred for the Campaign Missions do not count towards repayment. It is not necessary to complete a position for the troop loses to count, but you need to defeat a position in order to get a payout. Try to plan it so you can complete a position 1 – 2 levels above the level of the current reward with just enough troop losses in total to pay back the payout value. It may take the completion of several positions or partial positions to accumulate enough losses to meet the payout value.

Greater detail on meeting the payout value is contained in the Position Calc section.

Sparta – War of Empires Persian Positions Spreadsheet

The spreadsheet contains all you need for tracking the positions, calculating your bank and interest, evaluating scouting activity, and calculating resource and time requirements for building troops.

Units Tab

This tab contains all of the information required to estimate your offensive and defensive troop strength, the resources required for building grain consumption as well as a calculation area for Persian units. Data should only be entered into the cells shaded:

Only enter or modify data contained in the yellow-shaded cells. This warning applies for all tabs of this spreadsheet.

Input your grain reduction parameters in the upper left portion of the spreadsheet- Temple of Demeter level and grain reduction level from the Academy. This will allow you to calculate grain consumption requirements for your troops.

Grain Consumption Reduction		
Temple of Demeter Lvl	4	13%
Academy Grain Reduction Lvl	1	0.1%
Total Reduction		13.1%

The Offense portion of this tab contains all of the information on resources required to build troops, grain consumption for the units and a troop strength calculation for your offensive units. Your will need to input your agreement level for each troop and elixir level in the corresponding columns. You can then input the number of units and see the strength, resource requirements, and consumption rate for those units.

Tip: Always use the appropriate elixirs when attacking or defending Persian Positions. Up to level 4 elixirs can be inserted and extracted freely. Level 5 elixirs and above will require a tool for extraction (drachmas) to avoid having them destroyed. Example - If you have level 4 elixirs for all troop types, and you switch the elixirs as you complete the positions, you should enter lvl 4 elixirs for all units.

Offense

Unit	Timber	Bronze	Grain	Total	Grain/hr Base	Grain/hr Modified	Agrmnt Lvl	Elixir Lvl	Base Offense	Modified Offense	Units	Offense	Timber	Bronze	Grain	Total Resources	Grain/hr
Swordsman	90	150	60	300	1	0.869	1		40	40.0		-	-	-	-	-	0.0
Hoplite	100	270	150	520	1	0.869	1		60	60.0		-	-	-	-	-	0.0
Gladiator	250	250	0	500	1	0.869	1		75	75.0		-	-	-	-	-	0.0
Myrmidon	650	1080	436	2166	2	1.738	1		240	240.0		-	-	-	-	-	0.0
S Hoplite	720	1800	1000	3520	2	1.738	1		360	360.0		-	-	-	-	-	0.0
Legionnaire	940	940	0	1880	1	0.869	1		360	360.0		-	-	-	-	-	0.0
Sarissophoros	2370	3953	1500	7823	3	2.607	1		720	720.0		-	-	-	-	-	0.0
S Promachos	2175	5435	3000	10610	3	2.607	1		900	900.0		-	-	-	-	-	0.0
M Cavalry	5700	9500	3800	19000	4	3.476	1		1440	1440.0		-	-	-	-	-	0.0
A Horseman	5000	12277	7000	24277	4	3.476	1		1680	1680.0		-	-	-	-	-	0.0
										Total	0	0	0	0	0	0	0.0

The Defense portion of this tab is the same as above, but for your defensive units. Pay close attention to the base defense numbers. Each unit has a different strength against different unit types (Light Infantry, Heavy Infantry, Phalanx, and Cavalry). This is important to understand when defending. Here is the summary of the Spartan defensive stats.

Defense

	Base Defense				
Unit	L Inf	H Inf	Phalanx	Cavalry	Avg Defense
Javelineer	20	20	18	18	19.0
Psilos	30	26	16	16	22.0
Veles	30	30	30	30	30.0
Peltast	130	170	170	130	150.0
C Archer	170	170	130	130	150.0
Triarius	150	150	150	150	150.0
Thureophoros	300	300	500	500	400.0
T Thorakites	380	380	500	400	415.0
Scout	40	24	22	30	29.0
M Peltast	400	500	725	725	587.5

For example, the Thureophoros has an average base defense of 400, but has a base defense of 500 against Phalanx and Cavalry. This means the Thureophoros has an advantage while defending against Phalanx and Cavalry. While Peltasts and Cretan Archers have the same average defense, the Peltast is better defending against Phalanx and the Cretan Archer is better defending against Light Infantry.

You can use this knowledge to defend against the Persians more efficiently. In general, you want to defend with the same troop type (L Inf, H Inf, Phalanx, or Cavalry) where the Persians are strongest.

The Persians section of this tab contains the offensive/defensive stats for the Persian units and a column to input units so you can use it as a worksheet to calculate the total strength of the Persian force.

Persians

Unit	Offense	Defense Lt Inf	Hvy Inf	Phalanx	Cavalry	Average	Units	Persian Calculation Offense	L Inf	H Inf	Phalanx	Cavalry	Defense
Asvaran (Cav)	80	80	80	80	240	120		0	0	0	0	0	0
Dailamite (L Inf)	20	60	20	20	20	30		0	0	0	0	0	0
Archer (H Inf)	40	40	120	40	40	60		0	0	0	0	0	0
Immortal (Phal)	60	60	60	180	60	90		0	0	0	0	0	0
							Total	0	0	0	0	0	0

Again, pay attention to the Persian defense stats. You want to attack with the troop type where the Persians are weakest.
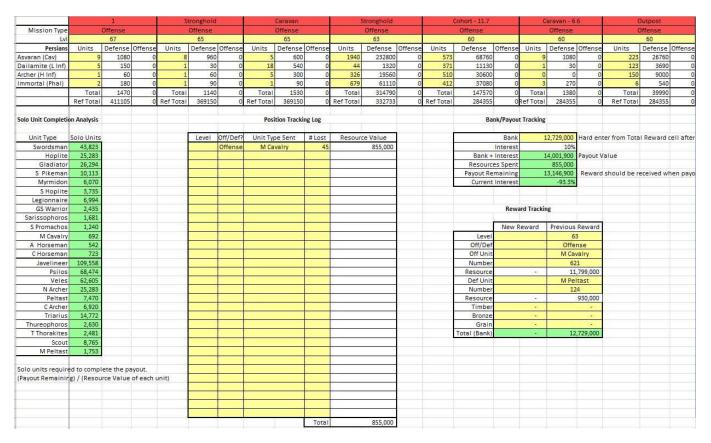
November 20, 2014

Production Tab

This tab can be used to calculate resource requirements and build time for units. Input the academy build time reduction level for each unit in the appropriate cell and you can calculate the build time and resource requirement by adding the units to the appropriate cell.

Position Calc Tab

This is the tab where you will enter all of the information regarding the Persian Positions – number and type of Persian units at each position, number and type of Spartan units sent and lost, and enter and track your bank and payout level remaining.

Again, only enter data into cells shaded:

Position Calc Tab

		1			Stronghold			Caravan			Stronghold			Cohort - 11.7			Caravan - 6.6			Outpost		
Mission Type		Offense			Offense			Offense			Offense			Offense			Offense			Offense		
Lvl		67			65			65			63			60			60			60		
Persians	Units	Defense	Offense	Units	Defense	Offense	Units	Defense	Offense	Units	Defense	Offense	Units	Defense	Offense	Units	Defense	Offense	Units	Defense	Offense
Asvaran (Cav)	9	1080	0	8	960	0	5	600	0	1940	232800	0	573	68760	0	9	1080	0	223	26760	0
Dailamite (L Inf)	5	150	0	1	30	0	18	540	0	44	1320	0	371	11130	0	1	30	0	123	3690	0
Archer (H Inf)	1	60	0	1	60	0	5	300	0	326	19560	0	510	30600	0	0	0	0	150	9000	0
Immortal (Phal)	2	180	0	1	90	0	1	90	0	679	61110	0	412	37080	0	3	270	0	6	540	0
	Total	1470	0	Total	1140	0	Total	1530	0	Total	314790	0	Total	147570	0	Total	1380	0	Total	39990	0
	Ref Total	411105	0	Ref Total	369150	0	Ref Total	369150	0	Ref Total	332733	0	Ref Total	284355	0	Ref Total	284355	0	Ref Total	284355	0

Solo Unit Completion Analysis				Position Tracking Log						Bank/Payout Tracking		
Unit Type	Solo Units			Level	Off/Def?	Unit Type Sent	# Lost	Resource Value		Bank	12,729,000	Hard enter from Total Reward cell after
Swordsman	43,823				Offense	M Cavalry	45	855,000		Interest	10%	
Hoplite	25,283									Bank + Interest	14,001,900	Payout Value
Gladiator	26,294									Resources Spent	855,000	
S Pikeman	10,113									Payout Remaining	13,146,900	Reward should be received when payo
Myrmidon	6,070									Current Interest	-93.3%	
S Hoplite	3,735											
Legionnaire	6,994											
GS Warrior	2,435									Reward Tracking		
Sarissophoros	1,681											
S Promachos	1,240										New Reward	Previous Reward
M Cavalry	692									Level		63
A Horseman	542									Off/Def		Offense
C Horseman	723									Off Unit		M Cavalry
Javelineer	109,558									Number		621
Psilos	68,474									Resource	-	11,799,000
Veles	62,605									Def Unit		M Peltast
N Archer	25,283									Number		124
Peltast	7,470									Resource	-	930,000
C Archer	6,920									Timber	-	-
Triarius	14,772									Bronze	-	-
Thureophoros	2,630									Grain	-	-
T Thorakites	2,481									Total (Bank)	-	12,729,000
Scout	8,765											
M Peltast	1,753											
Solo units required to complete the payout.												
(Payout Remaining) / (Resource Value of each unit)												
							Total	855,000				

There are four areas in this tab.

1) Position Strength – Main section at the top – used to track Persian strength at each Position.
2) Position Tracking Log – Used to track number and type of Spartan units lost and calculate resource value.
3) Bank/Payout Tracking – Used to track interest, bank and payout information.
4) Reward Tracking – Used as a reference for your last payout, and the place to calculate your new bank value after receiving a reward.
5) Solo Unit Completion – Calculates the number of solo units by type required to complete the payout (payout remaining value divided by resource value of each unit type).

Position Strength Area

		11			12			13			14	
Mission Type		Offense			Offense			Defense			Defense	
Lvl		46			45			67			66	
Persians	Units	Defense	Offense	Units	Defense	Offense		Defense	Offense	Units	Defense	Offense
Asvaran (Cav)	7	840	0	10	1200	0	382	0	30560	4005	0	320400
Dailamite (L Inf)	1	30	0	0	0	0	3593	0	71860	569	0	11380
Archer (H Inf)	0	0	0	1	60	0	3063	0	122520	1237	0	49480
Immortal (Phal)	4	360	0	2	180	0	3104	0	186240	222	0	13320
	Total	1230	0	Total	1440	0	Total	0	411180	Total	0	394580
	Ref Total	122220	0	Ref Total	113492	0	Ref Total	0	411105	Ref Total	0	391980

Enter the level for a position in row 3. The Reference Total (average Persian strength) will then populate from the "Position Strength" tab. There is space available for 24 positions (12 offense and 12 defense). Positions 1 -12 are for offense and 13 – 24 are for defense for full utilization of the tools within this spreadsheet.

Tip – At the start, the header (row 1) for each position is labeled 1 – 24. You can replace the number with the position type (cohort, caravan, temple, etc.) and distance to each position if you have multiple positions at the same level and type to avoid confusion.

The next section of the Position Strength area is for the number and strength of Persian units. The number of Persian units by type is entered into the shaded cells and the total by type and overall total will be calculated. If you attack or defend the position in multiple waves, you will need to adjust the number of Persian units remaining. You will be adding the number of Persian troops for offensive positions and subtracting the number of troops for defensive positions.

Tip – On an offensive position, the closer the Total is to the Reference Total, the closer you are to completing the position. On a defensive position, the closer the Total is to zero, the closer you are to completing the position.

When you scout a defensive position or complete an offensive position you can add the calculated total strength to the "Position Strength" chart in the appropriate cell next to the level you scouted or completed. This will allow you to build a better data set for the estimated strength of each level. When you complete a level you can delete all of the Persian information in the yellow cells.

Position Tracking Log

Level	Off/Def?	Unit Type Sent	# Lost	Resource Value
	Offense	M Cavalry	45	855,000
63	Offense	Swordsman	500	150,000
64	Defense	Thureophoros	250	1,250,000
		Javelineer	1500	180,000
			Total	2,435,000

The Position Tracking Log is used to track the number and type of Spartan units sent and lost as well as a resource value calculator for those losses. The level and Off/Def? columns can be used to track what you sent at each position. The troop type can be selected via a drop-down box and the number of losses is hard entered. It is very important to track all losses here. **Do not delete the Spartan troop loss data unless you have received a payout on that position level.** Once a payout occurs you may delete all of the information in the yellow cells of the Position Tracking Log. If you want to track your payouts and interest percentages over time, you will need to transfer the total resource value to the "Payout Summary" tab.

Bank/Payout Tracking Area

Bank/Payout Tracking		
Bank	12,729,000	Hard enter from Total Reward cell after payout
Interest	10%	
Bank + Interest	14,001,900	Payout Value
Resources Spent	2,435,000	
Payout Remaining	11,566,900	Reward should be received when payout remaining is below zero

The Bank value is the total resource value calculated in the Reward Tracking area. The interest is set to 10%, but can be adjusted if you are seeing different results.

The Payout Remaining and Resources Spent will calculate automatically as you complete the positions and enter your troop losses in the Position Tracking Log.

In theory, you will receive a payout reward when the payout remaining is below zero.

Reward Tracking Area

Reward Tracking		
	New Reward	Previous Reward
Level		63
Off/Def		Offense
Off Unit		M Cavalry
Number		621
Resource	-	11,799,000
Def Unit		M Peltast
Number		124
Resource	-	930,000
Timber	-	-
Bronze	-	-
Grain	-	-
Total (Bank)	-	12,729,000

There are two columns – New Reward and Previous Reward. If you are just starting out with this spreadsheet, you can enter your last payout information in the Previous Reward column and the total at the bottom is your new bank value. Transfer that value to Bank/Payout Tracking area above. When you receive a reward, the number of units as well as any resources received should be entered into the New Reward column. The total at the bottom is your new bank. Transfer that value to the Bank/Payout Tracking area and you can now replace the Previous Reward information with your new reward information. Only delete information in the yellow-shaded cells.

Solo Unit Completion

	Completion Anaylsis
	Solo Units
Swordsman	21,839
Hoplite	12,600
Gladiator	13,104
Myrmidon	3,025
S Hoplite	1,862
Legionnaire	3,485
Sarissophoros	838
S Promachos	618
M Calvary	345
A Horseman	270
Javelineer	54,598
Psilos	34,124
Veles	31,199
Peltast	3,723
C Archer	3,449
Triarus	7,362
Thureophoros	1,311
T Thorakites	1,237
Scout	4,368
M Peltast	874

This section summarizes the number of solo units for each unit type needed to complete the remaining payout value. This is done by dividing the payout value by the total resource value of each unit. This can help you calculate what is required as you get closer to the payout value.

Scouting

It is recommended to scout every available position (1 javelineer for defensive positions and 1 cavalry or phalanx unit for offensive positions) and enter the results in the appropriate column of the Persian Strength area of the "Position Calc" tab in rows 5 – 8. For lower offense levels you can send an offensive force of about 5 – 10% of the estimated Persian strength instead of a cavalry or phalanx unit, but a javelineer is good for any level of defensive position.

Scouting a defensive position will give you the total number of Persian troops attacking that position. The results for a defensive scouting position can also be entered into one of the calculation areas on the "Defensive Calc" tab to determine the number of solo units required to complete the position. Remember, it is best to defend with the unit type that has the strongest Persian presence. There is also a "Defensive Summary" tab that calculates the number of solo units required to defeat each defensive position.

Scouting an offensive position will give you the number of each type of Persian unit killed. From this information and the estimated Persian strength for the level you can calculate an estimate of the remaining number and strength of the Persian units. The "Position Analysis" tab contains a work area for scouting results of offensive positions. In addition, the "Offensive Summary" tab will contain a summary of each offensive position and the estimated solo units required to complete the position. Remember, it is best to attack with the unit type that has the weakest Persian presence.

Here are the results of scouting a Level 56 offensive position with 2 Spartan Promachos

Entering this data into the Persian Strength area of the "Position Calc" tab would look like this:

	1		
Mission Type	Offense		
Lvl	56		
Persians	Units	Defense	Offense
Asvaran (Cav)	2	240	0
Dailamite (L Inf)	34	1020	0
Archer (H Inf)	2	120	0
Immortal (Phal)	8	720	0
	Total	2100	0
	Ref Total	229063	0

We can now start to evaluate what it will take to eliminate this position. At first glance we can see that the worst unit type to defeat this position would be Light Infantry since that is the largest presence with a defensive strength of 1,020 and the best unit type to defeat this position would be Heavy Infantry, since that is the smallest presence with a defensive strength of 120.

We also see that the Persians lost a total of 2,100 of the estimated 229,000 so we need an average of 226,900 in offensive strength to defeat this position. If we use exclusively Light Infantry or Phalanx, it will take more than 226,900 and if we use exclusively Heavy Infantry or Cavalry it will take less. The next section discusses the "Position Analysis" tab where you can estimate what is required to complete the position.

Position Analysis Tab

This tab contains two sections. The top part is a work area for analyzing offensive positions and the bottom part is a basic calculation for analyzing defense positions. A more detailed analysis of defensive positions is contained in the "Defense Calc" tab.

Instructions for use of the two work areas are also contained on the tab.

Offense

The methodology behind the offensive calculation is that the number of Persian units killed per troop type is proportional to the total number of the Persian troops present. Using the ratio of the estimated total strength of the position to the strength killed we can calculate the estimated remaining Persian units and estimate total remaining strength.

This following calculation is performed for each troop type (Cav, L Inf, H Inf, and Phal)

((Estimated Troop Strength) / (Total Strength Killed)) (#units killed) = Estimated Initial Number of Troop

(Estimated Initial Number of Troops) – (Number of Troops Killed) = Number of Remaining Troops

Since this is an offensive position we can then calculate the Persian defensive strength for each unit type to determine the estimated strength required to complete the position for each unit type.

Utilizing the information from our scouting mission above the analysis looks like this:

Persian Positions - Solo Unit Analysis

Mission Type			Offense									
Lvl			56					Estimated Remaining				
Persian Defense	Units	Lt Inf	Hvy Inf	Phalanx	Calvary	Average	Units	Lt Inf	Hvy Inf	Phalanx	Calvary	Average
Asvaran (Cav)	2	160	160	160	480	240	216	17292	17292	17292	51877	25939
Dailamite (L Inf)	34	2040	680	680	680	1020	3675	220478	73493	73493	73493	110239
Archer (H Inf)	2	80	240	80	80	120	216	8646	25939	8646	8646	12969
Immortal (Phal)	8	480	480	1440	480	720	865	51877	51877	155632	51877	77816
	Total	2760	1560	2360	1720	2100	Total	298294	168601	255063	185893	226963

Spartans	Solo Units	Total						
						229063	Ref Total	
Swordsman	7458	298,320				109.077551	Ratio	
Hoplite	4972	298,320						
S Pikeman	3978	298,350		**Offense Position Instructions**				
Myrmidon	703	168,720		1)	Enter Level of Offensive Position in cell B5.			
S Hoplite	469	168,840		2)	Scout Offensive Position with 1 -2k of offense			
GS Warrior	469	168,840		3)	Enter number of Persian units killed in cells B7:B10.			
Sarissophoros	355	255,600		4)	Units in cells B13:B20 are the approximate number of solo units required to beat the position			
S Promachos	284	255,600		5)	For the most efficient use of troops use the unit with the lowest Total in cells C10:C17			
M Cavalry	130	187,200						
A Horseman	111	186,480						
C Horseman	207	186,300						

What this is telling us is that if we attack exclusively with L Inf it will take around 298,000 in strength; with H Inf it will take around 169,000; with Phalanx it will take around 255,000; and with Cavalry it will take around 186,000.

The estimated number of solo units required to complete the position is then calculated by dividing the strength for each troop type by the offensive strength of each Spartan unit. **The estimate may be off by several units depending on the total strength of the Persians at this position.** Remember, we are just using an estimated total strength and the actual value might be higher or lower. Typically if you add 1 – 2 units to the solo unit value you will complete the mission successfully.

Defense

The Defensive Calculation table in the tab is based on the theory that after you scout with 1 javelineer you can evaluate which unit seems most efficient based on the results. You can then send several of that unit as a secondary raid. Knowing what Persian strength those units killed you can calculate how many you will need to complete the position.

This method usually underestimates the number required and there is a more efficient method of evaluating defensive positions in the "Defense Calc" tab.

Offensive Summary Tab

This tab summarizes the solo units required to complete each offensive position using the method described above from the "Position Analysis" tab. No input is required on this tab as all of the information on the Persian presence is pulled from the "Position Calc" tab.

The top portion of this tab contains the summary of the solo units required by unit type for each position and the bottom portion contains the detailed breakdown for each position.

Here is what the summary table would look like if all 12 available offensive missions have been scouted.

Persian Positions - Offensive Solo Unit Analysis

Estimated Persian Defense Remaining and Solo Units Required

	1	Stronghold	Caravan	Stronghold	Cohort - 11.7	Caravan - 6.6	Outpost	Cohort - 13.5	9	10	11	12
	67	65	65	63	60	60	60	60	59	52	46	45
Persian Defense	Strength	Strength	Strength	Strength	Strength	Strength	Strength	Strength	Strength	Strength	Strength	Strength
Cav	663,219	645,632	389,245	28,912	157,261	483,928	344,274	255,977	508,734	240,196	190,829	196,091
L Inf	328,823	258,253	418,078	12,063	104,945	196,852	192,974	135,764	179,856	118,192	84,594	74,701
H Inf	295,383	271,165	341,190	13,449	129,008	188,650	236,238	164,291	179,856	118,192	80,660	80,926
Phal	339,969	284,078	273,913	16,607	137,017	262,470	167,310	230,027	210,688	232,571	127,875	93,377
Spartans	Solo Units	Solo Units	Solo Units	Solo Units	Solo Units	Solo Units	Solo Units	Solo Units	Solo Units	Solo Units	Solo Units	Solo Units
Swordsman	5,709	4,484	7,259	210	1,822	3,418	3,351	2,358	3,123	2,052	1,469	1,297
Hoplite	3,806	2,990	4,839	140	1,215	2,279	2,234	1,572	2,082	1,368	980	865
S Pikeman	4,216	3,311	5,360	155	1,346	2,524	2,475	1,741	2,306	1,516	1,085	958
Myrmidon	924	849	1,068	43	404	591	739	514	563	370	253	254
S Hoplite	573	527	662	27	251	366	459	319	349	230	157	157
GS Warrior	796	730	919	37	348	508	636	443	485	319	218	218
Sarissophoros	394	329	318	20	159	304	194	267	244	270	149	109
S Promachos	315	264	254	16	127	244	155	213	196	216	119	87
M Cavalry	398	387	234	18	95	290	207	154	305	144	115	118
A Horseman	380	370	223	17	91	277	198	147	292	138	110	113
C Horseman	723	704	425	32	172	528	376	279	555	262	208	214
Offensive Strength Efficiency												
Swordsman	1.237	1.413	0.851	1.472	1.258	1.438	1.219	1.447	1.500	1.500	1.430	1.490
Hoplite	1.237	1.413	0.851	1.472	1.258	1.438	1.219	1.447	1.500	1.500	1.430	1.490
S Pikeman	1.237	1.413	0.851	1.472	1.258	1.438	1.219	1.447	1.500	1.500	1.430	1.490
Myrmidon	1.377	1.345	1.042	1.320	1.024	1.500	0.996	1.196	1.500	1.500	1.500	1.375
S Hoplite	1.377	1.345	1.042	1.320	1.024	1.500	0.996	1.196	1.500	1.500	1.500	1.375
GS Warrior	1.377	1.345	1.042	1.320	1.024	1.500	0.996	1.196	1.500	1.500	1.500	1.375
Sarissophoros	1.197	1.284	1.298	1.069	0.964	1.078	1.406	0.854	1.280	0.762	0.946	1.192
S Promachos	1.197	1.284	1.298	1.069	0.964	1.078	1.406	0.854	1.280	0.762	0.946	1.192
M Cavalry	0.613	0.565	0.914	0.614	0.840	0.585	0.683	0.768	0.530	0.738	0.634	0.567
A Horseman	0.613	0.565	0.914	0.614	0.840	0.585	0.683	0.768	0.530	0.738	0.634	0.567
C Horseman	0.613	0.565	0.914	0.614	0.840	0.585	0.683	0.768	0.530	0.738	0.634	0.567

In one glance, you can now see the relative strength of each position by unit type, the estimated number of solo units required to complete the position and start planning how you want to attack them. Remember, the lower the strength total, the more efficient that unit type will be. As you can see, the majority of the positions above are heavily defended by cavalry.

There is also a strength efficiency section that provides a color-coded analysis on the relative efficiency of each unit type. The strength efficiency is calculation is (Average Total Persian Defense Strength) / (Estimated Total Strength Required by Troop Type) so a number greater than 1 is more efficient and a number lower than 1 is less efficient.

Defense Calc Tab

This tab can be used to calculate the estimated solo units required to complete a defensive position using the known Persian offensive strength. Remember, each Spartan unit has a different defensive strength against the different unit types (L Inf, H Inf, Phalanx, and Cavalry). This calculation method is based on the theory that the offensive strength of the Persians can be broken down into a percentage by unit type. That percentage is then multiplied by the defensive strength of the Spartan unit for each unit type. Those numbers are then added together to get a blended average defensive value for the Spartan Unit. With the known offensive strength of the Persian force you can then calculate the number of solo units required to defeat the Persians. Send 1 – 2 more units

The top portion of this tab contains the defensive strength of the Spartan units. The values are pulled from the "Unit" tab and should not be modified.

The bottom portion of this tab contains three work areas for calculations. You will enter the number of Persian units in the appropriate column and select the Spartan unit in the drop-down box. The estimated number of solo units required will then be calculated and displayed next to the Spartan unit type. Typically if you add 1 – 2 units to the solo unit value you will complete the mission successfully.

The next page contains an example of an analysis of a scouted level 60 defensive mission.

Defense Calc Example 1

Defense	C Archer	Javelineer	M Peltast	Peltast	Psilos	T Thorakites	Thureophoros
Cavalry	186.9	26.2	1029.5	186.9	23.3	568.0	710.0
L Inf	243.4	28.8	584.0	186.2	43.2	547.2	432.0
H Inf	243.4	28.8	724.0	243.4	37.4	547.2	432.0
Phal	186.2	26.2	1038.2	243.4	23.3	710.0	710.0
Avg	215.0	27.5	843.9	215.0	31.8	593.1	571.0

Mission Type	Defense		Spartan Unit		
Lvl	60		C Archer		1,215
Persian Offense	Units	Offense			
Asvaran (Cav)	137	10960	3.9%	7.2	
Dailamite (L Inf)	5694	113880	40.1%	97.7	
Archer (H Inf)	3035	121400	42.8%	104.1	
Immortal (Phal)	626	37560	13.2%	24.6	
Total	9492	283800	100.0%	233.7	1,214.50	154.0

Mission Type	Defense		Spartan Unit		
Lvl	60		Thureophoros		592
Persian Offense	Units	Offense			
Asvaran (Cav)	137	10960	3.9%	27.4	
Dailamite (L Inf)	5694	113880	40.1%	173.3	
Archer (H Inf)	3035	121400	42.8%	184.8	
Immortal (Phal)	626	37560	13.2%	94.0	
Total	9492	283800	100.0%	479.5	591.83	154.0

Mission Type	Defense		Spartan Unit		
Lvl	60		M Peltast		394
Persian Offense	Units	Offense			
Asvaran (Cav)	137	10960	3.9%	39.8	
Dailamite (L Inf)	5694	113880	40.1%	234.3	
Archer (H Inf)	3035	121400	42.8%	309.7	
Immortal (Phal)	626	37560	13.2%	137.4	
Total	9492	283800	100.0%	721.2	393.51	

Typically, the Thureophoros and M Peltast are the best units to defend Persian Positions because they both have strong cavalry and phalanx defense. Unfortunately, the Persian presence in this example is heavily skewed towards L Inf and H Inf on this position. In the example above, both the Thureophoros and M Peltast will be defending at less than their average defensive value (479.5 vs 571.0 for Thureophoros and 721.2 vs 843.9 for M Peltast) while the C Archer will be defending at greater than their average (233.7 vs 215.0). Here is what it looks like for some of the other units.

Defense Calc Example 2

Defense	C Archer	Javelineer	M Peltast	Peltast	Psilos	T Thorakites	Thureophoros
Cavalry	186.9	26.2	1029.5	186.9	23.3	568.0	710.0
L Inf	243.4	28.8	584.0	186.2	43.2	547.2	432.0
H Inf	243.4	28.8	724.0	243.4	37.4	547.2	432.0
Phal	186.2	26.2	1038.2	243.4	23.3	710.0	710.0
Avg	215.0	27.5	843.9	215.0	31.8	593.1	571.0

Mission Type	Defense		Spartan Unit			
Lvl	60		Psilos		7,603	
Persian Offense	Units	Offense				
Asvaran (Cav)	137	10960	3.9%	0.9		
Dailamite (L Inf)	5694	113880	40.1%	17.3		
Archer (H Inf)	3035	121400	42.8%	16.0		
Immortal (Phal)	626	37560	13.2%	3.1		
Total	9492	283800	100.0%	37.3	7,602.38	154.0

Mission Type	Defense		Spartan Unit			
Lvl	60		Peltast		1,301	
Persian Offense	Units	Offense				
Asvaran (Cav)	137	10960	3.9%	7.2		
Dailamite (L Inf)	5694	113880	40.1%	74.7		
Archer (H Inf)	3035	121400	42.8%	104.1		
Immortal (Phal)	626	37560	13.2%	32.2		
Total	9492	283800	100.0%	218.3	1,300.20	154.0

Mission Type	Defense		Spartan Unit			
Lvl	60		T Thorakites		499	
Persian Offense	Units	Offense				
Asvaran (Cav)	137	10960	3.9%	21.9		
Dailamite (L Inf)	5694	113880	40.1%	219.6		
Archer (H Inf)	3035	121400	42.8%	234.1		
Immortal (Phal)	626	37560	13.2%	94.0		
Total	9492	283800	100.0%	569.5	498.29	

For these units the Psilos and Peltast defend at greater than their average, while the T Thorakites defends slightly below their average. The most efficient types per unit class are Psilos, C Archer, and T Thorakites. If you are building from scratch you can enter the unit values into the "Production" tab to see the time and resource requirements to build the units. You can also build some of each unit class type at the same time and send multiple waves to complete.

Defensive Summary Tab

This tab summarizes the solo units required to complete each defensive position using the method described above from the "Defense Calc" tab. No input is required on this tab as all of the information on the Persian presence is pulled from the "Position Calc" tab.

The top portion of this tab contains the summary of the solo units required by unit type for each position and the bottom portion contains the detailed breakdown for each position.

Here is what the summary table would look like if all 12 available defensive missions have been scouted.

Persian Positions - Defensive Solo Unit Analysis												
Persian Offense Remaining and Solo Units Required												
	13	14	Temple	Olive Grove	Temple	Vineyard	Town - 25.7	Temple - 17.6	Temple - 21.4	Town - 10.7	Temple - 23.3	Temple
	67	66	65	64	64	63	63	63	63	63	62	60
Persian Offense	Strength	Strength	Strength	Strength	Strength	Strength	Strength	Strength	Strength	Strength	Strength	Strength
Cav	30,560	320,400	124,960	114,880	85,680	232,640	208,000	18,880	67,520	105,280	177,040	8,320
L Inf	71,860	11,380	11,120	62,220	8,060	27,160	3,320	85,340	43,280	105,520	75,080	86,640
H Inf	122,520	49,480	29,920	37,240	11,800	5,920	54,560	52,640	78,000	56,760	7,760	92,360
Phal	186,240	13,320	210,300	130,620	109,800	65,100	66,720	23,940	146,700	68,040	49,380	28,620
Total	411,180	394,580	376,300	344,960	215,340	330,820	332,600	180,800	335,500	335,600	309,260	215,940
Spartans	Solo Units	Solo Units	Solo Units	Solo Units	Solo Units	Solo Units	Solo Units	Solo Units	Solo Units	Solo Units	Solo Units	Solo Units
Javelineer	14,994	14,838	14,214	12,804	8,148	12,507	12,484	6,416	12,365	12,225	11,502	7,616
Psilos	13,273	15,396	15,056	12,146	8,683	13,145	12,891	4,913	11,513	10,508	10,863	5,785
N Archer	13,080	12,495	11,908	10,945	6,813	10,468	10,535	5,776	10,656	10,677	9,809	6,905
Peltast	1,794	2,015	1,688	1,610	985	1,663	1,603	859	1,494	1,616	1,569	990
C Archer	1,928	2,017	1,954	1,700	1,124	1,720	1,692	787	1,621	1,568	1,532	925
Thureophoros	711	592	554	548	315	485	503	364	551	584	487	451
T Thorakites	661	693	584	561	338	558	562	317	539	572	529	380
M Peltast	476	404	378	376	216	335	341	248	371	400	338	300
Defensive Strength Efficiency												
Javelineer	0.997	0.967	0.963	0.980	0.961	0.962	0.969	1.025	0.987	0.998	0.978	1.031
Psilos	0.974	0.806	0.786	0.893	0.780	0.791	0.811	1.157	0.916	1.004	0.895	1.174
N Archer	1.000	1.005	1.006	1.003	1.006	1.006	1.005	0.996	1.002	1.000	1.003	0.995
Peltast	1.066	0.911	1.037	0.997	1.018	0.926	0.965	0.979	1.045	0.966	0.917	1.015
C Archer	0.992	0.910	0.896	0.944	0.892	0.895	0.915	1.070	0.963	0.996	0.939	1.087
Thureophoros	1.013	1.168	1.190	1.103	1.199	1.195	1.159	0.872	1.067	1.008	1.113	0.840
T Thorakites	1.050	0.960	1.088	1.038	1.077	1.001	1.000	0.963	1.050	0.989	0.987	0.960
M Peltast	1.024	1.160	1.181	1.090	1.186	1.172	1.157	0.867	1.072	0.995	1.084	0.855

Payout Summary Tab

This tab can be used to track rewards, payouts, and interest percentages. After a reward is received the information can be transferred to this tab. Initially enter the level, position type and bank from your last reward in cells E5, F5, and G5. After receiving your next reward, complete the rest of the information in row 5. The previous payout information will now automatically populate in the next row and the interest rate will calculate automatically.

Input the new information every time you receive a payout to create a record of your results.

Position Strength Tab

This tab is a summary of the estimated total Persian off/def strength by mission level. The totals are referenced in the "Position Calc" tab when you select the mission level in row 3. Known troop strengths, from scouting defensive positions or tracking and completing offensive positions can be entered into the tables on the right. The average strength is calculated on the left.

Modifiers Tab

This tab contains the grain reduction, elixir boost and training time reduction percentages.

Strategy

Once you have become familiar with how the spreadsheets work and interact you can start planning how you want to attack or defend the positions. Remember, if you want to get ahead, you need to constantly build troops to pay off interest and you need to attempt to achieve payouts at increasingly higher levels. It is not recommended to risk the majority of your troops on a position planning for a reward. Keep building troops until you have a cushion to work with. If you do end up losing the majority of your troops, find the lowest available level and start working your way up until you receive a reward. Your bank and interest will be lower and you should be able to easily get back on track.

Here are some things to think about as you complete Persian positions.

Avoid Scrolls

Scrolls do not factor into calculating the bank, but your payout is greatly reduced when you complete a position that awards scrolls. The first off/def position completed at the highest available level will award scrolls. However, in order to advance the levels you will need to complete these positions. The best time to complete the highest available position is immediately after receiving a payout. It is unlikely that you will receive back to back rewards. This will only typically happen at lower level positions.

Tip - If you are trying to get a defensive payout at the highest available level, it is advised to complete the highest available offensive position first and then work your way to getting a payout on the defensive side. Do the reverse if you are trying to get an offensive payout at the highest available level.

If you receive scrolls along with a payout of troops, it is not necessarily a bad thing. Simply ignore the scrolls and calculate your new bank with the troops and resources awarded. You will have a smaller bank, so it will be easy to get back on track.

Overpayment

Occasionally you may reach the payout value without receiving an award. This is when it is good to have some partially completed or lower-level positions available that can be completed quickly with minimal losses. In addition to the position you are trying to receive a payout on have at least one position of a similar level that is very close to completion. Remember all troops lost while attacking or defending the positions count towards the payout value, but you will only receive a reward on a completed position. Partially completing a position counts towards the payout, but also provides a safety net.

If you still haven't received a reward after completing the partial completed position(s), it is recommended to complete the lowest available level. This will reset your bank to a lower level and allow you to work back up to the desired level.

Don't get discouraged. This is a long-term exercise and everything will balance out at some point. If you overpay significantly, you can expect to receive some early payouts (see below) in the future. It is also okay to take some time to build troops if necessary. Your payout value will not change if you are inactive for days or weeks.

Early or Split Payouts

Occasionally you may experience an unexpected payout, either before your payout value is completed or a reward that seems lower than it should be for the level. If you track rewards on the "Payout Summary" tab, you can get an idea of what the reward should be for each level. If this occurs, just calculate your new bank and work on getting back on track.

Tip – You can try to force an early payout by going to the lowest available position and working your way up from there. With an early payout, you are able to save a portion of the troops you won and reset your bank at a lower level.

Methodology

Here is one way to approach the Persian positions using this spreadsheet.

1) After receiving a reward, calculate and enter your bank value
2) Decide what type (off/def) and level of position you want to target for your next payout
3) Scout the desired position and analyze what it will take to complete that position
4) You can enter the number of solo units you would like to use to complete the desired position in the unit loss column of the Position Tracking Log as a placeholder. This will subtract from your payout value allowing you to see what you will need to lose before attempting the desired position. *If you receive an early payout, make sure you delete this value prior to calculating your new bank.*
5) Start attacking or defending positions; keeping an eye on the Payout Remaining Value as you progress. If you are using a placeholder, when the value in the Payout Remaining cell is below zero you are ready to complete the desired position.

Tip: There may be a slight variation in the number of solo units required as estimated by the Offensive and Defensive calculators. This could be an issue if it takes fewer units to complete than was estimated, leaving you just short of the payout value. As you complete more positions get a feel for this. It might be good to initially plan on one or two units less required for completion on your desired position.

How you complete the positions depends on your situation. You may want to complete the highest off/def position first to receive the scrolls and advance the level. You may want to partially complete one or two positions to leave a safety net. You may want to partially complete as many as possible in preparation for the Global Quest. You may want to complete as many as possible if the Global Quest is active.

Utilize this method or find whatever works best for you. Happy hunting!