**Epic 8:** As a player, I want to engage in battle with enemy factions, so that I can invade and defend territory.

8.1 - As a player, I want to lower the enemy’s health in a series of skirmishes, so that I can inflict casualties in an engagement (HIGH) SP: 7

* Skirmishes are run until one of the armies is eliminated or routed entirely
* Towers are not counted when checking if a defending army is defeated
* If the attackers are successful in their invasion, they take control of the province
* Upon beginning a skirmish, a unit is randomly (uniform) chosen from each army
* When an army is defending walls with towers, the towers can be selected as a unit
* The number of towers which can be included as units depends on how developed the province’s walls are
* Towers have infinite defence, except against artillery
* Towers have infinite morale and cannot route
* If an unit attacks a tower, the skirmish may end before the attacking unit routes or is defeated (this has a random chance)
* Both units being melee units results in a 100% chance of a melee engagement
* Both units being missile units results in a 100% chance of a missile engagement
* The result of all engagements is presented to the player via visual or text information
* In a battle where there are no walls present, if there is 1 ranged unit and 1 melee unit, there is a base-level 50% chance for the engagement to be a melee engagement, and a base-level 50% chance for an engagement to be a ranged engagement.
* Where a battle has walls, and there is 1 ranged unit and 1 melee unit, there is a base-level 10% chance for the engagement to be a melee engagement, and a base-level 90% chance for an engagement to be a ranged engagement.
* The base-level chance of engagement to be a melee engagement, where the engagement has both a melee and missile unit, is increased by *10% x (speed of melee unit - speed of missile unit)*
* Where the engagement has both a melee and missile unit, the maximum chance for an engagement to be either a ranged or melee engagement is 95% in either case. The exception is where a tower is in an engagement, since all battles involving a tower will be ranged engagements
* Melee units cannot inflict damage in a ranged engagement.
* Ranged units in a ranged engagement inflict casualties against the enemy equal to: (size of enemy unit at start of engagement x 10%) x (Missile attack damage of unit/(effective armor of enemy unit + effective shield of enemy unit)) x (N+1)
* The above point is up to a maximum of the entire enemy unit, and a minimum of none of the enemy unit
* N is a normally distributed random variable, with mean0 and standard deviation 1
* The ranged attack damage should also incorporate the effect of any bonuses and penalties
* Cavalry, chariots and elephants attacking a province with walls do not receive any melee bonus from their charge statistic.
* Melee cavalry/chariots/elephants defending a province with walls, or attacking a province without walls, will have an attack damage value in all engagements equal to: *melee attack damage + charge value*.
* Infantry and artillery do not receive a charge statistic
* Only cavalry, chariots and elephants receive a charge statistic
* Units in a melee engagement inflict casualties equal to: (size of enemy unit at start of engagement x 10%) x (Effective melee attack damage of unit/(effective armor of enemy unit + effective shield of enemy unit + effective defense skill of enemy unit)) x (N+1)
* All attributes in the formula above should incorporate the effect of bonuses and penalties
* Battles longer than 200 engagements should result in a draw and the invading army return to the province it invaded from
* Towers whose health points are reduced to 0 are disabled for the remainder of the battle. They have 100 health points and can only be damaged by artillery of the invading faction. Artillery missile damage against towers will differ against missile damage against troops
* Other units types will be unable to damage towers, but towers can damage all unit types

8.2 - As a player, I want to break enemy units and make them route, so I have a higher chance of winning a battle (LOW) SP: 7

* The base probability of a unit breaking is 100% - (morale x 10%)
* The morale value refers to the morale after applying campaign and battle morale adjustments
* The chance of fleeing a battle is increased by: *(casualties suffered by the unit during the engagement/number of troops in the unit at the start of the engagement)/(casualties suffered by the opposing unit during the engagement/number of troops in the opposing unit at the start of the engagement) x 10%*
* If the player’s unit loses a larger proportion of soldiers than the opposition in an engagement, the change of the player’s unit breaking is increased by a large value from the base fleeing change in comparison to the enemy
* For any engagement, the minimum chance of fleeing the battle is 5%, and the maximum chance of fleeing the battle is 100%, after any calculations or adjustments
* Units against towers cannot route, but have a chance of escape of minimum(50% + (speed x 10%), 100%). Escaped units can return to the battlefield for a following skirmish, unlike the routed enemies.
* If both units break, they both flee the battle without inflicting further casualties upon each other.
* If a unit breaks, and the opposing unit does not, it will repeatedly attempt to flee the battle
* Each failed route results in an engagement in which the fleeing unit suffers casualties, without damaging the pursuing unit, until it is successful in fleeing or is destroyed
* Units which break will not attempt to return to the battle.
* If a unit breaks, there is a base-level 50% chance of it successfully routing for every attempt.
* The minimum chance a unit can have to successfully route is 10%
* The maximum chance a unit can have to successfully route is 100%
* The speed of units in the engagement affects the change of successfully routing
* The formula that calculates the chance of routing successfully is as follows: *chance of routing successfully = 50% + 10% x (speed of routing unit - speed of pursuing unit)*
* If towers are destroyed, the walls and towers will be repaired immediately after the battle at no cost to the faction owning or conquering the towers
* if a unit successfully routes from the battle, if it is in an attacking army which loses the battle, it will return to the province from which it attacked, but if the attacking army wins the battle, the routing unit will join the army in moving into the new province.
* The entirety of a defending army which is defeated/routed is destroyed.