Pathfinder Scaling Kingdom Combat

Intent

The army battle rules of Kingmaker (and later exported into Ultimate Campaign), like a lot of “minigames” in APs are a sudden introduction of a wholly new set of rules onto the players after they have already established themselves in other sets of rules. These rules are complex enough to take time to learn and use well, but also so simple that after they are learned, they are effortlessly mastered and the glaring flaws in the rules are obvious. (I’m especially looking at the part where spellcasters add their maximum spellcasting level to their level to determine their power, basically making a level 14 full caster stronger than any non-caster before they do anything else.) At the same time, because the army battle rules were nothing more than a distraction, you will see maybe half a dozen army battles (and Kingmaker encourages you to find non-army battle means of making the enemy armies back down or switch to your side) before the entire system is entirely forgotten, making it feel to many players like learning the rules and the time spent developing their own army was a waste of time.

On a totally different front, I also didn't like how troop rules, by being extensions of swarm rules, essentially negate the value of AC simply because a bunch of goblins which individually couldn’t hope to hit on anything other than a nat 20 suddenly got the bright idea to bunch up. Even more strangely, against archery attacks, you use ref saves instead of AC, so a low-AC rogue suddenly can dodge all arrows when they'd be pincushioned by individual archers, and the full plate tower shield fighter suddenly is helpless against troops of archers.

The main goal here is to unite the army rules with troop rules, revising both so that troops play using as much of the same set of rules all other characters do as possible. This should have the effect of allowing the familiarity the players presumably have with the normal game rules to do most of the heavy lifting, so that even if some of the rules are complex, they are at least familiar rules whose implications should be intuitive to experienced Pathfinder players rather than making players learn whole new ones.

Before plunging ahead with these rules, however, one thing to note is that original Kingmaker army rules were made to make the army rules, while perhaps not satisfying, at least a fairly quick and painless diversion if you didn’t want to delve too deep. (Although I suppose simply describing the mass battles entirely through role-play narrative would be even faster if nobody enjoyed the rules at all.) These are rules that are going to make large-scale battles take longer, and if you try to do the scale-changing (where the battle "zooms in" to allow PCs to fight at a normal scale on an individual level) often, you can easily make a single battle take over a whole session. Whether this is "epic" or "boring" depends on whether your players are into the operational-level scale. I'd definitely recommend making sure "nobody is left out" by allowing different units to be run by different players, even if those players' PCs aren't leading those units. With that said, I've run the troop rules I've made for normal combats just as allies and enemies of the PCs, and those keep things running pretty smoothly, and it certainly makes

things like, say, squads of level 2 warrior bandit archers a lot faster to play and makes fighting a fort filled with 100 soldiers both possible and actually threatening to level 7 parties.

At the same time, these rules also credibly allow for players to use their own NPCs to assist them. For example, in defense of their own settlements, PCs might be able to have their own town guard man the walls, raining arrows on invading trolls to assist the PCs as they do the heavy lifting keeping the gates clear and finishing off trolls that have fallen to make sure they do not get up again without requiring the GM to run 30 NPCs that likely have trouble contributing much individually.

Scaling Troops

As opposed to Kingmaker army scaling, this system uses geometric scaling to reach new orders of magnitude every two increments. In layman's terms, this means that the numbers go 1-3-10-30 and so on, instead of 1-2-5-10-20. This means there isn't that sudden jump between "fine" being 10 and "diminutive" being "armies" of a single character, and it also makes things line up neatly with real-world military units since they tend to scale geometrically by threes, as well. This will be covered in more detail in the scale comparison and scaling combat sections later.

Originally, I was going to use the same "fine, diminutive, tiny, small" scaling of the game, but since some commentators mentioned that calling a unit a "small troop of large creatures" was confusing, I changed over to using modern military unit sizes. I also changed how much space larger formations take up because an entire battalion fitting in only a 20x20 foot square just becomes silly. Hence, a battalion, which would be "gargantuan" will actually take up more space on the board than a normal single gargantuan creature. When it comes to space occupied, I generally refer to a troop of medium-sized creatures. If there are differently-sized creatures, they scale up or down as though the troop were an organizational unit larger or smaller. I.E. a squad ("tiny" troop) of 10 ogres takes up the same 5x5 space as a platoon ("small" troop) of 30 medium humanoids, and a battalion ("gargantuan" troop) of 300 tiny creatures occupies that same 5x5. This also conflicts with swarms (where that would all fit in a 10x10 foot area), but Pathfinder's always been a patchwork of conflicting rules written by different people, so in the interest of keeping things able to scale simply, let's just put the logical inconsistency aside.

On the scale of normal battles with individual PCs, I do not recommend using any troops larger than platoons ("small"), because having massive 9x9 square blobs of troops gets ridiculous. In battles on the "normal Pathfinder" scale with individual PCs on the board, break units larger than "small" into smaller units (three for each size category) until they are "small", and do the same for their attachments. If the PCs fight a medium army of 100 humanoids, for example, they fight 3 different small troops. If they fight an army of 100 large monsters, they fight 10 "tiny" troops that take up the space of small troops of medium creatures (5x5 space each). If they want to fight larger scale battles, I'll get into the scale factor in a later post.

After that, take a base creature, and find its average hit points, as well as average damage. (I.E. a creature that does 1d8+2 damage does 6 avdam.) Multiply the average HP of a troop by 70% of its expected number of soldiers. (I.E. a troop of 10 soldiers has 7 times the HP, a troop of 30 soldiers has 21 times the HP.) The exception is a “diminutive troop” - round down to 2 times the base creature health rather than 2.1 times. This is because a troop that falls below that number will drop a size category, but unless a troop is made of creatures that fight to total destruction (like a horde of zombies), we just presume that any unit that takes 70% or more casualties instantly routs and remove it from play. (If they are units that fight to total destruction like golems or mindless undead, replace the troop with one a size lower, and deal any excess damage over what destroyed the larger troop to the new troop.)

Troops attack using actions like normal individual units, so they can move and standard attack, charge, or full attack if only 5-foot-stepping. If a troop is made of creatures that have more than one attack, create both a "standard attack" version with just one attack, and a "full attack" version of the attack. Add the potential damage of every attack in a full attack together, multiplying anything with a -5 (like second iterative attacks or secondary natural attacks) by 0.75, any attack with a -10 by 0.5, and any attack with -15 by 0.25 before rounding down to find average damage of full attacks. If the base creature has vital strike or something, calculate the standard attack average damage as if vital strike were used.

Troops get a bonus to attack rolls of +3 per size category above "fine"/individual, and a troop at least tiny in size gets a +4 bonus to attack rolls from their overwhelming number of attacks. (This means a tiny troop has a +10 to attack, and a small troop has a +13 to attack. Also, if you make them "huge" size characters, be sure to add a buff to negate the attack penalty.) Unlike with individual unit attacks, we count the margin of success for attacks. Simply reaching the target's AC means the troop "hit once", and does the average damage for the base creature, but if you beat the AC by 2 or more, the troop hits several times, to a maximum of 5 hits against an individual standing outside the troop. The troop can make attacks on up to three individuals in reach. Individual characters can move inside the spaces of troops, and troops can move over individual characters. Individual characters are considered flanked (but with a +4 to attack instead of +2) if inside the space of a troop, and the maximum number of hits against them rises to 10. Troop attacks can still critical hit (and do triple damage if it's an x3 weapon), but only one attack is critical, so if a character is hit 5 times and critical hit for x2 damage, treat it as being hit 6 times. (To show an example of this, if a PC has an AC of 20, and the troop rolls a 25 on an attack, the PC is hit 3 times - and would be hit 4 times if it were a 26 - so you multiply the average damage of the base unit by 3.) DR still applies per hit, so adamantine armor or barbarian DR can be more useful than usual, while spells like Protection from Arrows or Stoneskin will require tracking of total damage prevention left but be very strong.

If a troop fights another troop or an individual at least huge in size, they cannot occupy the same space, but they inflict extra hits per each margin of success, up to the number of soldiers in the unit in hits. (Larger targets allow for every member of the troop to get in a hit.) Troops can flank other troops like normal characters do, gaining a +4 bonus to attack for doing so. (Having higher attack keeps things doing higher damage on both sides, meaning more attrition and battles that don't drag on because both sides miss too often.)

Troops with ranged attacks like archer troops can make volley attacks that affect an area equal to a 5' radius per size category of the troop above "fine"/individual. You otherwise roll attack rolls like normal, and still incur attacks of opportunity from opponents in reach. (In this example, two characters are both hit with a very good roll on a volley attack, so they get hit 5 times for 3 damage per hit, or 15 damage. The glaive paladin within reach would get an AoO against the troop at the same time, however.)

For special rules attacking a troop, individual target spells can inflict damage, but conditions applied to individual targets are considered meaningless. Area of Effect spells that inflict damage do normal damage if only 1 to 3 squares the troop occupy are affected, do double damage if at least 4 squares the troop occupies are affected, triple damage if at least 9 squares are effected, and so on. (This dissuades cheesing by putting Fireballs down just baaarely touching between several troops.) Troops roll a single save for the whole troop, taking half damage on a save against a Fireball, for example. In cases like a whole troop being affected by a spell like Confusion, treat the troop as attacking itself (while flanking) for 1/4th damage on the first round, and 1/2 damage on the next, and otherwise try to adjudicate spells with odd effects on the fly. If a character has feats like cleave or whirlwind attack that allow for attacks against multiple creatures, they can treat troops as multiple creatures if they are standing within reach of at least two squares of the troop. Mass or communal spells that inflict conditions can affect troops if the number of targets can apply to a number of targets at least equal to the number of soldiers in a unit. (Attachments of multiple casters casting multiple communal spells at the same time can affect their host unit.)

For CR purposes, treat diminutive troops as +2 CR, and then +3 CR for every size category above diminutive. (I.E. diminutive troops are +2 CR, tiny troops are +5 CR, and small troops are +8 CR.) Treat 1/2 CR base creatures as being 0 CR and 1/3 or 1/4 CR creatures as -1 CR before adding this on. (A tiny troop of basic goblins (1/4 CR normally) are 3 CR.)

Troop Attachments

Attachments exist to allow for "leaders", "heroes", and also so that you don't have to make an army entirely of wizards without bodyguards. Attachments are individuals or troops at least two sizes smaller than their attached unit. Like troops, a large individual creature counts as the same size as a diminutive troop for attachment purposes, so a single large commander can only attach to a troop of at least "small" size, like 30 medium creatures.

The PC party (if nobody is large) can easily be made an attachment for any troop at least small in size. Unlike other troops, just treat them as individuals unless the current fight is trivial to them and they want to speed things up, but they can still use the rules to move with the attached troop if they want. In large conflicts with a scale factor, if PCs want to fight individually, it's best to "pause" the larger conflict and start standard-scale battle.

Attachments can choose to detach on either their or their attached unit's turn by moving out of the troop or not moving when the troop moves. If the attached troop moves and the attachment wants to stay attached, it must move itself, and expends its next move or full action doing so.

Attachments are considered to have cover while attached against ranged attacks or spells. (Attachments can be targeted by spells that inflict conditions if they can affect the number of soldiers in the attachment or the whole area of the attachment. For example, a character might cast Grease and not affect a whole troop with tripping, but affect the attachment.) They are considered to have total cover against melee attacks unless they choose to engage in melee themselves, at which point they drop to soft cover for one round. Enemy troops which choose to attack an attachment exposed in this way make an attack roll against both the attachment and the troop they are attached to, and deal half damage with any hits. While attached to a larger troop, an attachment can adjust position within the troop on their turn.

Attached troops like clerics can use abilities like channel to heal their own troops using the same rules as AoE attacks on troops (healing double or triple HP), and if they are troops, themselves, also multiply their effects by the number of units. For example, a diminutive attachment of level 3 clerics (3 level 3 clerics, averaging 7 healing HP per channel) attached to a small troop can channel to heal their troop for 84 HP because all three clerics heal for quadruple HP for affecting at least 16 squares of the troop.

Attachments that are troops (rather than individuals) must have identical abilities. (If only for bookkeeping sanity.) This means that if you have consumable abilities (like uses/day class features or spells), all members of the troop need to have identical abilities or spells memorized/known, and must all use the same ability at the same time, although they can pick different targets. For example, a diminutive attachment of 3 level 3 wizards must all cast Create Pit at the same time if one does, but can spread the pits out so that an entire enemy troop is caught in the affected area.

A Scale Comparison

Here's also a few notes on how I treat each size, and a rough correlation to real-world military units.

- "Fine" sized troop - an individual soldier - 1x1 space for a medium unit. Basically, not a troop, but here for completeness sake.
- "Diminutive" sized troop - roughly 3 (between 2 and 5) soldiers. 2x2 space for medium creatures. This correlates to a team or crew, probably led by a specialist. I generally don't bother with diminutive troops except as attachments, as it's probably fine to just have 3 individuals. It does make for a good way to treat a siege weapon crew as a single unit, though. (Ballistas are crewed by warriors, but indirect fire weapons use siege engineers made of experts with siege weapon training. You might also include a team of alchemists that operate a catapult that flings alchemical explosives or something.) +3 CR to the base creature type.
- "Tiny" sized troop - roughly 10 (between 6 and 19) soldiers. Correlates to a squad that would have a squad sergeant, or a "contuberium" in Roman units. (8 soldiers and 2 POGs that fit into a single big tent and shared two mules and cooking pot. The smallest division of soldiers in Roman legions.) 3x3 space for medium creatures. +5 CR to the

base creature type. Good for small support units like archers, if you need to not absurdly overflow hallways inside a fort, or if you don't want to hit the party with a single big blob. I use these the most.

- "Small" sized troop - roughly 30 (between 20 and 59) soldiers. Correlates to a platoon, and would be led by a lieutenant (lowest unit led by an actual officer) in a modern army. 5x5 space if made of medium creatures, or 2x2 in scale factor 3 battles. Can make a "main bulk" of a battle specifically against an army, like a bunch of basic warriors. When on the normal scale of battle, I suggest having attachments for these that have decent abilities (like a bard) to make them more than a blob of HP, or at least say something interesting about the unit. (Like goblin troops led by a hobgoblin lieutenant disfavored enough by command to be forced to lead the goblins.) +7 CR to the base creature type.
- "Medium" sized troop - roughly 100 (between 60 and 199) soldiers. Correlates to a company led by a captain or major in modern militaries, or a Roman century (80 soldiers and 20 POGs). These would be 9x9 space, but for normal-scale battles, I recommend breaking these up into 3 small troops that move on one initiative and try to stay in a "line abreast" formation. Useful for a scale factor 3 battle as a 3x3 unit if you're getting into the big battles. +9 CR
- "Large" sized troop - roughly 300 (between 200 and 599) soldiers. Correlates to a battalion led by a Lt. colonel in modern militaries, or a Roman cohort. These would be a 16x16 space unit, although in scale factor 3 battles, they make up 5x5 units, and in scale factor 10 battles, they are 2x2. +11 CR.
- "Huge" sized troop - roughly 1,000 (between 600 and 1,999) soldiers. Correlates to a regiment led by a ("full bird") colonel in modern militaries, or a Roman milliaria. (Well, actually, modern NATO countries tend not to use "regiments" as organizations since the Cold War, skipping from battalion straight to brigade, as things get less and less well-defined from this point on. I need something here to keep the organizational levels properly spaced, though.) This would fill 30x30 spaces, and you should break them up into 3 "large" troops for scale factor 3 battles. If you have more than one of these, consider a scale factor 10 battle, where they are 3x3 size units. +13 CR.
- "Gargantuan" sized troop - roughly 3,000 (between 2,000 and 5,999) soldiers. Correlates to a brigade led by a brigadier general in modern armies. A Roman legion was about 5,500 soldiers, so it straddles the line between "Gargantuan" and "Colossal" (although it tends towards "Colossal" if you count the support units). This would fill 50x50 spaces, and makes up 5x5 in a scale factor 10 battle. +15 CR.
- "Colossal" sized troop - roughly 10,000 (between 6,000 and 19,999) soldiers. Correlates to a modern division, led by a major general in modern armies. Fills 90x90 spaces, and you might want to make it into three "gargantuan" units even at scale factor 10. +17 CR (lol).

If you have units of gargantuan or colossal size being levied, maybe it's time to track population, and destroy (so that they stop producing, but can be rebuilt for half cost) buildings from the settlements when you levy quantities of troops in magnitudes like these. Since a settlement building represents about 250 population, a colossal-sized unit represents 40 building's worth of population. Everything from large size upwards is at least a building.

You can go bigger than this, but unless you're representing a world war, conflicts on this scale shouldn't happen. You'd need to go scale factor 30, as well, which would probably need a lot more abstraction, or maybe a way to have casters do "siege magic" since normal standard action spells don't cut it anymore.

In the event you need it (like if there is a colossal army of huge-sized giants, gods help your players), colossal+1 would fill 160x160 5' spaces, colossal+2 would fill 300x300 5' spaces, colossal+3 would fill 500x500 5' spaces, and colossal+4 would fill 900x900 spaces. (Note that this is close to a square mile, the size of a whole settlement district.)

I don't recommend having *just* a single troop as a battle. Split them up if you have to, but it's better to have at least 2 troops and a notable individual unit (possibly as an attachment) to make battles more than just "gang up on the blob".

Also, note that Kingmaker has a "gargantuan" (1,000 soldiers) and a "colossal" (2,000 soldiers) army, but because of how I treat scale differently, those would be "huge" and "gargantuan", instead. Be sure to tell the players that the Pitax army is CR 17 and fight alongside CR 15 and CR 14 troops, making it just under a CR 19 battle. That should wake them up.

Speaking of supporting these size units, it's too late to change the rules for your players without it feeling like pulling the rug out from under them, but one of the things I did was made the things like bard colleges and wizard towers required to form units of specific classes (providing a pool of a certain level of classes per building), and reducing their economic value, while making the otherwise garbage markets and wharfs more economically valuable. (Nobody uses the rules for a whole kingdom having about 4 magic items available, they'll just craft their own magic items first.) A bardic college (being a 2x1 building) can provide 500 level 1 bards, but for every level above that, they cost double. (I.E. 10 level 4 bards count as 160 from your pool of 500 bards.) You can also feel free to be flexible with these things, like being able to draw skalds from the same pool as bards or barbarians, and maybe having taverns add a smaller (+50?) pool of bards, fighters, rogues, or barbarians to draw from.

Troop Size Table

This table tries to put numeric elements of troops into an easier-to-read format.

Troop Size	Soldiers	Modern Eq	Roman Eq	Tactical Scale Size (Med)	Scale 3 Size	Scale 10 Size	Hits per MoS	CR adj.
Fine	1			1x1				0
Diminutive	3	Team / Crew		2x2			1/5	+2

Tiny	10	Squad	Contuberium	3x3	1x1		1/2	+5
Small	30	Platoon		5x5	2x2		1	+8
Medium	100	Company	Century	9x9	3x3	1x1	3	+10
Large	300	Battalion	Cohort	16x16	5x5	2x2	10	+13
Huge	1,000	Regiment	Milliaria	30x30	10x10	3x3	30	+16
Gargantuan	3,000	Brigade	Legion	50x50	16x16	5x5	100	+19
Colossal	10,000	Division		90x90	30x30	9x9	300	+22
Colossal +1		Corps		160x160	50x50	16x16		
Colossal +2		Army Group		300x300	90x90	30x30		
Colossal +3		Front		500x500	160x160	50x50		
Colossal +4		Theater		900x900	300x300	90x90		

Scaling Combat

When it comes to scale factor, I should point out first that I haven't really tested these rules, as the game I GMed using them basically never got above fighting with small and tiny squads.

The basic idea, however, is that when battles get large, you set a new scale for conflict. I'll be describing scale factor 3 here, because I've not really figured out how to handle scale factor 10 too well when it comes to spellcasting (there aren't many abilities that come in lots of 10 uses per day), but you can probably extrapolate the rest of it.

Scale factor 3 battles mean that every square now represents 15x15 feet of space, and every scale factor 3 round is 3 normal rounds in time (18 seconds). You otherwise still use the same swift, move, and standard actions. A unit that has 20 foot speed normally still moves 4 squares with a single action, the scale is just different. If a unit makes a standard attack, you roll standard attacks 3 times. If a unit full attacks, you roll the full attack for that unit 3 times. (Yes, this means some full attacks wasted, but we're abstracting, here. Besides, it keeps things in line with the rest of the game so it's intuitive to the players, and that's the main goal.)

Even at this kind of scale, with three attacks per round, it'd also be silly for a roll of 22 against an AC of 20 to represent 100 soldiers hitting only 3 times out of their 100 potential attacks.

Medium troops hit 3 times on a hit, with 3 more hits for every margin of success. Large troops hit 10 times on a hit, with 10 more hits for every margin of success, etc. (See “hits per MoS” above.) Because it's a simple multiple that will apply to *every* attack, it's better to just change the damage of a single "hit" to be three times what the base creature can do per attack. (I.E. the 1d6 damage shortbow troop that normally does 3.5 average damage per hit will, as a medium troop, have 10.5 average damage rounded down to 10 on a hit, with +10 damage per "three more hits" margin of success.)

When it comes to range with normal attacks, reach has little meaning when each square is 15 feet, so just presume that troops are adjacent to attack, but if one troop has shorter reach than the other, their opponent gets a (single roll) AoO standard attack when they move adjacent to the opponent. Archer units do not provoke AoOs when firing at this range, presuming that any archer at melee range will be backing up or switching to a melee weapon while their fellows fire from behind them.

Duration-based buff abilities like rage and bardic inspire courage can still work mostly like normal (but get consumed three times as fast), but when it comes to spellcasting, you have to make some adjudications, because spells aren't made to work at this scale. A single Fireball doesn't quite fill up a 3x3 square area now (you'll need to adjudicate areas here - a fireball fills up about 5 squares's worth of area at this scale, although that obviously means it's not a circle), but you might be having a platoon of sorcerers launch 30 at once (so 150 squares of effect). In fact, you get three rounds of spellcasting, so a troop of sorcerers gets to cast three times in one round (six if you dare to include quickened castings) if they use a standard action to cast. Hence, that small troop of sorcerers is casting as many as 90 Fireballs (if they have 3 spell level 3 slots to use). Even spells like Grease cast en masse can fill up the equivalent of a square per two castings, so 90 Grease spells fill up 45 squares on this scale map. Or, they could cast Fireball once each (30 times), and then 60 Grease spells to fill up 30 squares of the map. (If a whole troop's area is covered, it can be tripped with the normal penalties and option for a standard attack AoO, and moving into the area still counts as difficult terrain.) At the same time, remember ranges are also scaled down by 3 and for non-instantaneous spells like buffs, durations last 1/3rd as many rounds at this scale. 10 level 7 wizards casting Confusion, for example, affect 10 separate 2x2 squares out to a range of 11 squares for 2 rounds. At short range, Grease can probably only be cast out to a range of 2 squares (unless you have reach spell on tap for a whole unit)! A spell like Haste, meanwhile, could be cast by an attachment of bards or wizards (or clerics with Blessing of Fervor) to give an extra standard attack roll to their attached unit per casting if at least level 9, or per two castings if level 5. (Since it's one creature/level.)

For classes with other class abilities that are standard actions, like hexes on witches or channeling on clerics, they can also use those abilities in place of one of their three spells during a casting action. Because troops can cast several times, you might have a situation like a tiny attachment troop of 10 witches that can use Slumber hex three times each with a standard

action, being able to affect a small troop of 30 units (including possibly 30 large-sized creatures that are equivalent in size to the medium troop they are attached to). Even though slumber isn't normally valid against a troop, being able to affect an equivalent number to the whole troop through mass uses of the hex allows for affecting a whole troop.

For other class abilities, monks can throw in a stunning fist and stun a whole troop if they use a number of uses that would cover their opponent's number of soldiers. I.E. a small troop of 30 monks using stunning fist on another small troop of 30 warriors uses one use of stunning fist, while 30 monks need to use 3 uses of stunning fist to affect a medium troop of 100 warriors. It still takes 1 use to stunning fist a smaller troop size. The same goes for similar abilities, like paladins using smite evil on a troop of evil creatures - they need to use 3 uses to affect a troop with triple their number. For purposes of actions, we treat one or three smite evils in a single scale 3 round as a single swift action by a troops.

If PCs are the attachment of a unit that comes into contact with an enemy unit, offer the players breaking things down into a "normal scale" fight. Move the players onto a different map (since we're handily using Foundry) and break down the troops the party is in and fighting into small or tiny troops. Every three rounds they fight on this scale, the battle around them goes on, which may mean there are enemy or ally reinforcement units. Remember, it's a scale of 1 square on the bigger scale = 3x3 squares on the normal scale, so if you have a map size of 45x45 for the "normal scale", that's a whole big 15x15 area of the scale factor 3 map, so choose how large to make the map (and what gets pulled into the local fight) carefully. You might still let the battle "flip" between the large-scale and small-scale battle, with the small-scale battle taking three rounds per one that goes on at the larger scale, but any unit on the smaller-scale map obviously needs to have its moves adjudicated to match the larger scale, which can be a recordkeeping headache since you just split a troop of units with resources to track in three and now need to merge them back together when done. Unless the players really want to, just have the bigger battle advance without their input in the background during any set of 3 rounds they're busy with their smaller battle.

If the players are uninterested in resolving things on the standard scale (generally because there is a mismatch in strength so great it’s not worth the detail), find a “standard attack” and “full attack” for the full party that represents damage the whole party can inflict (not counting critical hits) while using only abilities that have unlimited daily uses (such as standard attacks, maneuvers, or kineticist blasts, and presuming that basic, non-specialized ammunition is unlimited) and finding average damage for each attack and totaling all of them together. Divide this maximum damage by 10, and treat the party as a troop (usually a diminutive one). The attack bonus of the troop is the average attack bonus of the party’s members with whichever attacks they possess, with touch attackers being treated as having an extra +10 bonus, then add the usual attack bonus for a troop of its size, with a maximum of 10 hits. If a party member has no effective attack with unlimited uses (such as a high-level wizard with only a crossbow and a low attack bonus), they may opt not to add their attack to prevent dragging the party attack bonus down.

When it comes to experience points, because these are almost certainly battles between the PC's subordinate units and an army with a total CR that would be ludicrous compared to the PC's level, you should definitely treat troops as earning a "share" of XP, the same way that you split XP among individual PCs. Look at the CR of troops under the PCs - troops with CR the same as the PCs take an equal share of the XP as the PCs do. (I.E. if you have a party of 4 level 12 characters and they are assisted in battle by a CR 12 troop, split the XP by five, so that each PC gets 1/5, and the troop gets 1/5.) For ease of calculation, I suggest that if you need to give out a “quarter share”, treat the PCs and any other whole number share as four times as large. This might lead to the players asking for troops to level up, but remember that replacement soldiers are probably less experienced. You might keep track of XP for them, but if they have to replace 1/3rd of the size of the troop's soldiers with recruits of their current level, they lose 1/3rd of the XP to next level. Also, 100 soldiers split their troop XP 100 ways, so they may be lower-leveled and gaining a lot of XP as a troop, but their level gain will still be relatively slow. (You should also establish an expectation of loot from battles. Even if the party doesn't have a set treasure sharing policy, the party should be expected to distribute shares of the treasure to the followers that participated. Failure to meet this means a reputation for stinginess and lowered morale, while exceeding this can mean a reputation for generosity, as with the leadership feat.)

The following table describes how many shares of experience and treasure gained by comparing troop CR to APL. (APL-4 meaning that if the party is level 10, the CR of the allied troop is 6.)

Allied Troop CR	Experience Share
APL-4	1/4
APL-3	3/8
APL-2	1/2
APL-1	3/4
APL	1
APL+1	3/2
APL+2	2
APL+3	3
APL+4	4
APL+5	6

APL+6	8

For CR further above, multiply the amount of shares by 2 for every two CR increased. (For example, APL+9 troops take 24 shares.)

Also, in case it matters, a "building" on the kingdom settlement map is roughly 100x100 normal squares in space (really representing several city blocks). A colossal unit is nearly the size of a settlement "building", to give a sense of scale. You can treat it as 30x30 squares on a scale factor 3 battle (with city walls being two tiles wide), or 10x10 squares on a scale factor 10 battle, just in case you want to have a mass army battle take place inside the city streets. There should be avenue tiles along spaces between "building" blocks, but moving through "buildings" with large units should be difficult terrain as the troops have trouble keeping formation and funneling through narrower streets.

Troop Morale

I also don't generally use morale here, mainly going by hunch as to when a unit might be panicking, and rolling a morale save (basically, a DC 11 roll with a morale modifier) when they take what would be demoralizing losses (having less than 1/3 HP, or taking over 1/3 their HP in damage in one round) or if a nearby unit of at least their CR routs. Good or bad morale is a bonus or penalty of +/- 2 per point of morale. Failure means retreating or routing. Success means a loss of 1 point of morale but otherwise remaining in battle. (This loss is temporary and resets to the baseline morale after battle.)

If an enemy troop routs, all troops in sight of that rout with less CR than the routing troop gain 1 temporary morale.

If you wanted morale to play a more active role in battle, and don't mind some extra math (or just adding a buff/debuff for every unit's character sheet), good morale can also be a +15%/+30%/+45%/+60% damage modifier, or bad morale can be equivalent maluses.

Movement Points (MP)

The following rules seek to merge and clarify movement across the “regional map” size (using the same 12 mile hex rules as kingdom mode),

A creature has a number of movement points equal to every 4 miles it can march in a single day, rounded down. This equates to 1 MP per 5 feet of movement a creature possesses for creatures moving for 8 hours at a walk.

One Day (Overland)

Speed	15 feet	20 feet	30 feet	40 feet	50 feet
Walk	3 MP	4 MP	6 MP	8 MP	10 MP

Hustle

A character can hustle for 1 hour without a problem. Hustling for a second hour in between sleep cycles deals 1 point of nonlethal damage, and each additional hour deals twice the damage taken during the previous hour of hustling. A character who takes any nonlethal damage from hustling becomes fatigued.

A fatigued character can't run or charge and takes a penalty of –2 to Strength and Dexterity. Eliminating the nonlethal damage also eliminates the fatigue.

For the purposes of movement points, only whole numbers of MP are useful, however multiple fractions can be added together (through successive hours of hustling or forced marching) to add up to a whole number.

Troops cannot hustle on the regional map scale.

One Hour (Overland)					
Speed	**15 feet**	**20 feet**	**30 feet**	**40 feet**	**50 feet**
Hustle	+.4 MP	+.5 MP	+.75 MP	+1 MP	+1.25 MP

Forced March

In a day of normal walking, a character walks for 8 hours. The rest of the daylight time is spent making and breaking camp, resting, and eating.

A character can walk for more than 8 hours in a day by making a forced march. For each hour of marching beyond 8 hours, a Constitution check (DC 10, +2 per extra hour) is required. If the check fails, the character takes 1d6 points of nonlethal damage. A character who takes any nonlethal damage from a forced march becomes fatigued. Eliminating the nonlethal damage

also eliminates the fatigue. It's possible for a character to march into unconsciousness by pushing himself too hard.

One hour of forced marching grants as many movement points as one hour of hustling would, unless one is hustling during a forced march, in which case the MP value is doubled.

Troops may make a forced march up to four hours, but must take a morale check (with a penalty of two times the number of hours marched) or lose a point of morale, and four-hour forced marches automatically fail. Troops made to forced march over three or more days without resting automatically lose a point of morale. Nonlethal damage taken is multiplied by the number of soldiers in the troop and presumed healed only after a day of rest.

Mounted Movement

A mount bearing a rider can move at a hustle. The damage it takes when doing so, however, is lethal damage, not nonlethal damage. The creature can also be ridden in a forced march, but its Constitution checks automatically fail, and the damage it takes is lethal damage. Mounts also become fatigued when they take any damage from hustling or forced marches.

Cavalry troops making forced marches multiply the amount of lethal damage to their mounts by the number of mounts in the troop.

Movement Point Cost

Groups of creatures have movement points equal to their slowest (lowest MP) member unless they are willing to split up. "Explore" includes the MP cost for the PCs to explore the given hex type.

Terrain	Highway	Road or Trail	Trackless	Explore
Desert, sandy	3	6	6	9
Forest	3	3	6	9
Hills	3	4	6	9
Jungle	3	4	12	12
Moor	3	3	4	6
Mountains	4	4	6	12

Plains	3	3	4	6
Swamp	3	4	6	9
Tundra, frozen	3	4	4	6

Partial Movement

Certain terrains, such as trackless jungles, may require more MP than a creature or group can spend within a single day. In cases such as these, the creature or group can spend as much of their MP as possible moving into a new hex, placing their token an appropriate fraction of the way between the hex they are leaving and the hex they are attempting to enter on the map. A GM may decide that a group must be able to pay at least 1/3rd of the MP to enter a hex to attempt a partial move.

If the creature or group later changes their mind, and wants to cancel their movement into a hex at the start of a new day, it costs as much MP as they have already spent in partial movement to reverse course and return to the hex they had last occupied.

Naval and Other Movement Types

Unless passing through dangerous waters, such as rocky shoals that require careful navigation, all travel through water, air, or special movement types like burrowing is expected to take a similar 3 MP per hex. MP for creatures is determined by the same rules as land-based creatures. Flying creatures are generally expected to land and rest more frequently during overland travel, but can overall average 8 hours of movement per day.

Seagoing vessels and the rare airship are capable of traveling 24 hours per day, presuming that a rotation of pilots and crew can be set up. These generally allow for three times the MP their base speed would allow. Such vessels cannot hussle or forced march. Spells which alter the air or sea flow, such as Tailwind allow for vessels to travel at maximum speed for sustained periods, but most times, vessels are presumed to be making an average of 1/3rd their top speed. If land-based vehicles are magically driven and can be sustained for 24 hours (such as by undead horses),

Magical conveyance, including spells such as Tailwind must be cast or potentially recastable to last at least 8 hours in this system. Both 8 hour and 24 hour examples are given.

Rowing vessels, such as galleys, are not capable of sustained use of their high speed, barring untiring magical rowers. Typically, galleys (including longships and keelboats) would rely upon their single sail and operate as a sailing vessel for any long-distance travel, and only use their

oars in situations that required tight maneuvering. Vessels such as triremes and war galleys are wholly unsuited to long-distance travel or use outside the calm sea states of inland seas or lakes, and generally have no room to feed or house their crew, requiring being brought ashore for breaks during the day or to sleep at night.

Rowing induces fatigue and non-lethal damage as a hussle, and any crewed ship larger than a rowboat automatically fails their constitution checks.

Crafts such as rafts, barges, flatboats and keelboats travel downriver at a speed determined by the stream or river they are upon. Streams usually are faster than larger rivers, which grow slower as they grow wider. Such vessels travelling upstream that cannot sail or pole faster than the current tend to use pack animals like mules to march upstream. These vessels travel at the speed of their animals.

Land Vehicles			
Vehicle	**Normal Speed**	**N/A**	**Passengers**
Carriage	MP of the pulling creatures	-	6
Cart	MP of pulling creature(s) - 2	-	n/a
Chariot, Light	MP of the pulling creature(s)	-	2
Chariot, Medium	MP of the pulling creature(s)	-	4
Chariot, Heavy	MP of the pulling creature(s)	-	6
Dog Sled	MP of the pulling creatures	-	1
Sleigh	MP of the pulling creature(s) or 10 MP (halve MP cost of frozen terrain) for sail	-	4, 1 if sailed

Steam Giant	12 MP	-	10
Wagon, Light	MP of the pulling creature(s)	-	4
Wagon, Medium	MP of the pulling creature(s)	-	4
Wagon, Heavy	MP of the pulling creature(s)	-	4
Water Vehicles			
Vehicle	**Standard Speed**	**Magical Speed**	**Passengers**
Raft, 8 hours	9 MP downstream, 6 MP downriver, 1 MP poled upriver	9 MP	1-10
Barge, 8 hours	9 MP downstream, 6 MP downriver, 1 MP poled upriver, or MP of pulling creatures	9 MP	50–150
Barge, 24 hours	19 MP downstream, 16 MP downriver	27 MP	50–150
Galley, 8 hours	8 MP (sailed)	21 MP (magically rowed)	200–400
Galley, 24 hours	-	63 MP (magically rowed)	200–400
Keelboat, 8 hours	4 MP (9 MP downstream, 6 MP downriver)	12 MP	4–104
Keelboat, 24 hours	12 MP (19 MP downstream, 16 MP	36 MP	4–104

	downriver)		
Junk or Dhow, 8 hours	6 MP	15 MP	7-100
Junk or Dhow, 24 hours	18 MP	45 MP	7-100
Longship, 8 hours	6 MP	24 MP (Magically sailed and rowed - 18 MP for sailed only)	50–150
Longship, 24 hours	18 MP	72 MP (Magically sailed and rowed - 54 MP for sailed only)	50–150
Elven Wingship,8 hours	8 MP	24 MP	5-35
Elven Wingship, 24 hours	24 MP	72 MP	5-35
Rowboat, 8 hours	4 MP	6 MP	1-3 (2-10 for Jollyboat)
Rowboat, 24 hours	-	18 MP	1-3 (2-10 for Jollyboat)
Sailing Ship, 8 hours	11 MP	21 MP	20-140 (Brigantine, Caravel, Carrack) or 4-104 (Cutter, Sloop)
Sailing Ship, 24 hours	33 MP	63 MP	20–140
Warship, 8 hours (only Xebecs can be rowed)	12 MP	27 MP (Magically sailed and rowed - 21 MP for sails only)	60-220

Warship, 24 hours (only Xebecs can be rowed)	36 MP	81 MP (Magically sailed and rowed - 63 MP for sails only)	60–220
Air Vehicles			
Vehicle	**Maximum Speed**	**Magical Speed**	**Passengers**
Airship, 8 hours	20 MP	-	100
Airship, 24 hours	60 MP	-	100
Alchemical Dragon, 8 hours	20 MP	-	80
Alchemical Dragon, 24 hours	60 MP	-	80
Glider, 8 hours	-	16 MP	1