- 1. The volleyball team and the wrestling team at Arlington High School are having a joint car wash today, and they are splitting the revenues. The volleyball team gets \$1 per car. In addition, they have already brought in \$80 from past fundraisers. The wrestling team has raised \$60 in the past, and they are making \$2 per car today. After washing a certain number of cars together, each team will have raised the same amount in total. How many cars will that take?
- 2. Kalya, a frequent business traveler, is considering signing up for a hotel rewards program. Hotel Elegance is currently offering 600 points for signing up, plus 4 points for every night Kalya books at the hotel. Alternatively, Hotel Paradiso is offering a sign-up bonus of 500 points, plus 5 points per night. If Kalya books a certain number of nights, the points she earns with either hotel will be the same. How many nights will that be?
- 3. Band students are tested on, and required to pass, a certain number of scales during the year. As of today, Tyshell has passed 10 scales, whereas her friend Rita has passed 5 of them. Going forward, Tyshell has committed to passing 1 scale per week, and Rita has committed to passing 2 per week. At some point soon, the two friends will have passed the same number of scales. How long will that take?
- 4. Two classmates got together over the weekend to do their assigned History reading. Holly can read 1 page per minute, while Umeko can read 2 pages per minute. When they met, Holly had already read 30 pages, and Umeko had already gotten through 10 pages. After a while, they had both read the same number of pages. How long did that take?
- 5. For his parents' anniversary party, Abraham is considering using one of two venues. A hotel in Castroville will cost \$60 for a reservation, plus \$4 per person. A restaurant in the same city will cost \$5 per person, in addition to \$50 for the reservation. In order to make the best decision, Abraham figures out how many attendees it would take to have the venues cost the same amount. What would the total cost be?