

LESSON
3.2**Challenge Practice***For use with the lesson "Graph Linear Equations"***In Exercises 1–3, use the following information.**

For a summer job you have a choice between working for two rival dog-walking businesses. Pedestrian Paws dog-walkers will pay you \$2 an hour plus \$3 per dog walked. Roaming Rover dog-walkers will pay you \$3 an hour plus \$2 per dog walked.

1. If you walked 8 hours and had 3 different dogs to walk each hour then how much more would you earn from Pedestrian Paws dog-walkers than from Roaming Rover dog-walkers?
2. What number of dogs would you have to walk in order for Pedestrian Paws to pay more than Roaming Rover?
3. What number of dogs would you have to walk in order for Pedestrian Paws to pay the same as Roaming Rover?

In Exercises 4–6, use the following information.

For a summer job you have a choice between working for two rival car wash businesses. Auto Suds will pay you \$3 an hour plus \$4 per car washed. Clean Car will pay you \$5 an hour plus \$3 per car washed.

4. For a one-hour period, how many cars would you have to wash in order for Auto Suds to pay more than Clean Car?
5. For a one-hour period, how many cars would you have to wash in order for Auto Suds to pay \$4 more than Clean Car?
6. For a one-hour period, how many cars would you have to wash in order for Auto Suds to pay the same amount as Clean Car?

In Exercises 7–9, use the following information.

For a summer job you have a choice between working for two rival lawn mowing businesses. Precision Cuts will pay you \$1.50 an hour plus \$5 per lawn mowed. Lush Lawns will pay you \$5 an hour plus \$3 per lawn mowed.

7. For a one-hour period, how many lawns would you have to mow in order for Precision Cuts to pay more than Lush Lawns?
8. For a one-hour period, how many lawns would you have to mow in order for Precision Cuts to pay at least \$3 more than Lush Lawns?
9. For a one-hour period, how many lawns would you have to mow in order for Precision Cuts to pay at least \$1 less than Lush Lawns?