

**For each problem, write a proportion and an equation in the form  $y = kx$ . Answer each question and state the constant of variation for the problem.**

1. Heather weekly pay is directly proportional to the number of hours she works at the record store. Her pay is \$174 for 24 hours of work. Find the amount of pay for 40 hours of work.

Proportion:	$y = kx$ :
Constant of Variation:	Answer:

2. Eduardo counted 10 seconds between seeing lightning and hearing thunder, and he knew that the lightning was about 2 miles away. If he counted 4 seconds between the next flash of lightning and thunder, how far away was the lightning?

Proportion:	$y = kx$ :
Constant of Variation:	Answer:

3. At top speed, a rabbit can cover 7 miles in 12 minutes. IF a rabbit could continue at this rate indefinitely, how long would it take the rabbit to cross the 220-mile expanse of the Mojave Desert?

Proportion:	$y = kx$ :
Constant of Variation:	Answer:

3. A dishwasher uses 65 gallons of water to wash 5 loads of dishes. How many gallons of water would be used to wash 12 loads?

Proportion:	$y = kx$ :
Constant of Variation:	Answer:

4. A person's weekly pay is directly proportional to the number of hours worked. Shawn's pay is \$123.00 for 20 hours of work. Find the amount of pay for 31 hours of work.

Proportion:	$y = kx$ :
Constant of Variation:	Answer: