

# Formulas and Equations

You can use a formula to solve problems about distance.

Marco drove for 4 hours at an average speed of 53 miles per hour. How far did he travel?

Use the formula distance = rate  $\times$  time.

$$d = r \times t$$

$$d = 53 \times 4$$

$$d = 212$$

Find the values for  $r$  and  $t$  in the problem. Substitute them into the formula to find  $d$ .

Marco traveled 212 miles.

Find the distance for the given values of  $r$  and  $t$ .

1.  $r = 25$  miles per hour  
 $t = 3$  hours

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2.  $r = 600$  feet per minute  
 $t = 10$  minutes

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3.  $r = 20$  kilometers per hour  
 $t = 4$  hours

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4.  $r = 15$  inches per second  
 $t = 35$  seconds

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5.  $r = 550$  miles per hour  
 $t = 6$  hours

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6.  $r = 250$  miles per day  
 $t = 7$  days

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**Use** the formula  $P = (2 \times \ell) + (2 \times w)$  to find the perimeter of each rectangle.

7.  $\ell = 11$  inches  
 $w = 5$  inches

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8.  $\ell = 18$  meters  
 $w = 13$  meters

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9. **Writing to Explain** A deer ran for 4 minutes at an average speed of 2,000 feet per minute. An ostrich ran for 3 minutes at an average speed of 3,000 feet per minute. Which animal ran a greater distance?

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