Name _KEY_   Date_____

 Chapter 7 **Review**
Sections 7.1 - 7.4

Write the word sentence as an equation.

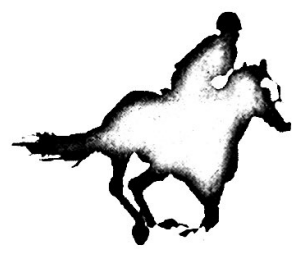1. 3 increased by a number x is 9.

2. The product of a number y and 3 is 6.

Solve the equation. Check your solution.

3. $u + 3 = 7$

4. $a - \dfrac{3}{4} = \dfrac{1}{8}$

5. $y \div 9 = 81$
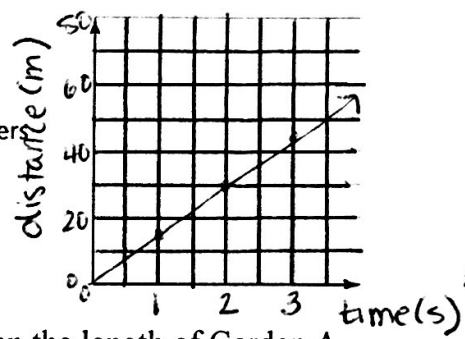
6. $15 \times b = 60$

Tell whether the ordered pair is a solution of the equation.
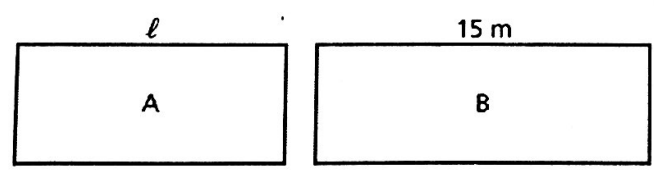
7. $y = 9x;\ (4, 36)$

8. $y = 3x - 5;\ (7, 16)$

9. Write and graph an equation in two variables that shows the relationship between time and distance.

Moves 15 meters in 1 second.

10. The length of Garden B is 3 more than the length of Garden A. Write an equation you can use to find the length ℓ of Garden A.

ℓ	15 m
A	B

11. Your bedroom ceiling is 10 feet high and is $\dfrac{2}{3}$ as high as the living room ceiling. Write and solve an equation to find the height h of the living room ceiling.

� 12. You leave your house and walk for half an hour at a speed of 3 miles per hour. Then you run for 15 minutes at a speed of 7 miles per hour. You are now halfway to town. Write and solve an equation to find the distance from your house to town.

Answers

1. $\underline{3 + x = 9}$

2. $\underline{3y = 6}$

3. $\underline{u = 4}$

4. $\underline{a = 7/8}$

5. $\underline{y = 729}$

6. $\underline{b = 4}$

7. $\underline{yes}$

8. $\underline{yes}$

9. $\underline{d = 15t}$

   $\underline{\text{See left.}}$

10. $15 = \ell + 3$

11. $\dfrac{2}{3}h = 10$

   $h = 15\ ft.$

✶ 12. $\dfrac{1}{2}(3) + \dfrac{1}{4}(7) = \dfrac{d}{2}$

   $\dfrac{3}{2} + \dfrac{7}{4} = \dfrac{d}{2}$

   $\dfrac{6}{4} + \dfrac{7}{4} = \dfrac{2d}{4}$

   $(2)\dfrac{13}{4} = \dfrac{d}{2}(2)$

   $\dfrac{13}{2} = d$

   $\boxed{6.5\ miles = d}$