

Chapter Test C

For use after Chapter 4

Decide whether the given ordered pair is a solution of the equation.

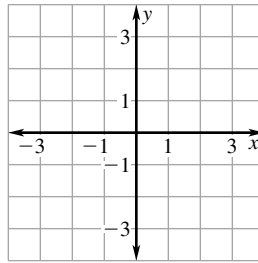
1. $3y + 12x = -4; (\frac{1}{5}, -\frac{32}{15})$

2. $8 - 3x + 24y = 0; (5, \frac{23}{24})$

In Questions 3 and 4, use a table of values to graph the equation.

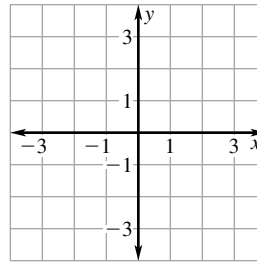
3. $28y + x = 7$

<i>x</i>			
<i>y</i>			



4. $y = \frac{4}{5}x - \frac{1}{5}$

<i>x</i>			
<i>y</i>			



5. Your school biology club is organizing a pancake breakfast to raise \$400 for a trip to an aquarium. You decide to charge \$2 for each child and \$5 for each adult. Write an equation to show the relationship between the number of people and the amount of money raised.

Find the *x*-intercept of the graph of the equation.

6. $13x + 24y = -5$

7. $-14 + 6y = 7x$

Find the *y*-intercept of the graph of the equation.

8. $17x + 4y + 10 = 0$

9. $13 + 5y = 15x$

Find the slope of the line passing through the points.

10. $(-5, 5), (-7, -6)$

11. $(7, 12), (4, -13)$

Find the value of *y* so that the line passing through the two points has the given slope.

12. $(6, y), (\frac{3}{2}, \frac{9}{5}), m = \frac{2}{3}$

13. $(12, y), (-6, \frac{9}{7}), m = -\frac{1}{6}$

Answers

1. _____

2. _____

3. Use grid at left.

4. Use grid at left.

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

13. _____

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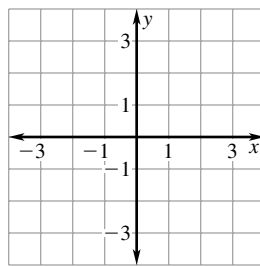
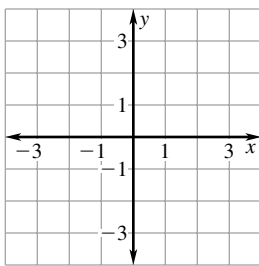
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14. In 1990, a restaurant chain had a profit of \$45,000. In 1998, the company had a profit of \$2,605,000. Find the average rate of change of the chain's profit in dollars per year.
15. Your phone company charges \$0.05 per minute for long distance phone calls on the weekend. Write a direct variation model that relates the total cost x to the number of minutes y spent talking on the phone.

Write the equation in slope-intercept form. Then graph the equation.

16. $18y + 2x - 9 = 0$

17. $3x - 4y = -8$



Solve the equation algebraically.

18. $\frac{1}{2}x + \frac{2}{3} = \frac{1}{8}x - \frac{3}{2}$

19. $-4.3 + 5.1x = 5.3x + 7.1$

Decide whether the graphs of the two equations are parallel lines.

20. $2x + 3y = 5$, $9y + 6x - 1 = 0$

21. $15 + 3x - 10y = 0$, $30x + 24 = 10y$

Evaluate the function when $x = 4$, $x = 0$, and $x = -3$.

22. $f(x) = 1.5x - 0.4$

23. $h(x) = \frac{3}{8}x + \frac{2}{3}$

24. $g(x) = -14x + 5$

25. $k(x) = 3.2 - 5x$

Find the slope of the graph of the linear function f .

26. $f\left(\frac{5}{2}\right) = \frac{7}{2}$, $f(4) = 6$

14. _____

15. _____

16. _____

17. _____

18. _____

19. _____

20. _____

21. _____

22. _____

23. _____

24. _____

25. _____

26. _____