

1: Apply the Distributive property: $5(x + y + 2)$

2: Simplify: $\frac{14}{21}$

3: Find the prime factorization of 40.

4: Simplify the following expression: $|-58| =$

5: Perform the indicated operation $25 - (-12) - 7 - (-2) + 9$

6: Perform the indicated operation: $19 - 5 \cdot 3 + 3$

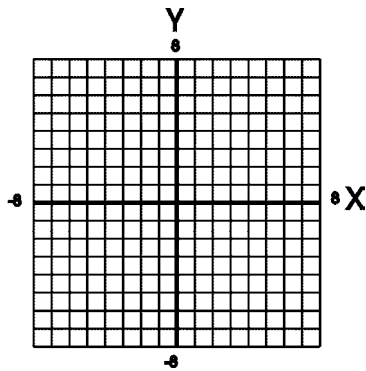
7: Evaluate $45 \div 3 \cdot a$, for $a = -1$

8: Solve for x: $\frac{2}{3} + \frac{1}{4}x = 6$

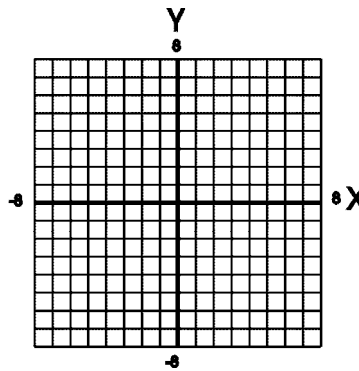
9: Evaluate $45 \div 3^2 x(x-1)$, for $x = 3$

10: Solve this equation for x: $\frac{4}{5}x = 16$

11. Graph $y = \frac{1}{3}x$



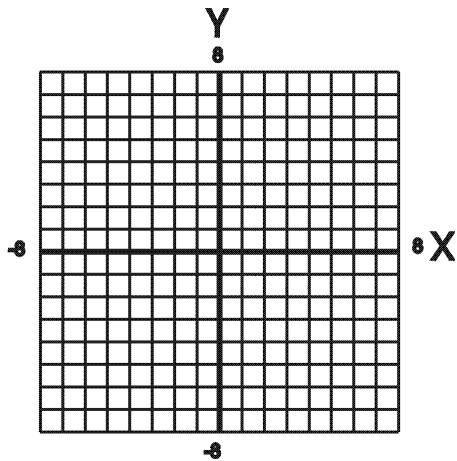
12. Graph: $8x - 4y = 12$



13: Find the x and y intercepts of this equation

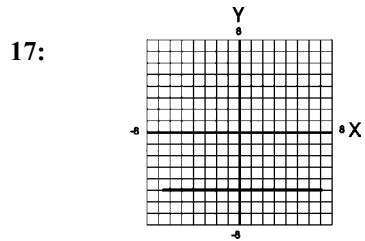
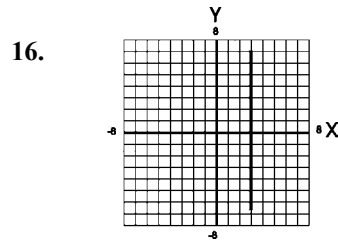
$x + 3y = 6$ THEN graph it

14: Divide $\frac{7}{6} \div \frac{3}{5}$

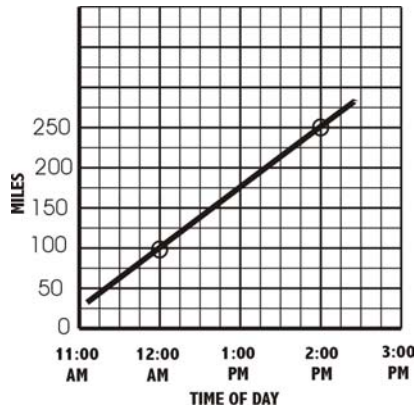


15: Perform the indicated operation $25 \div 5^2 \cdot 6$

Write an equation for each of the following two graphs. Place the equation below each graph.

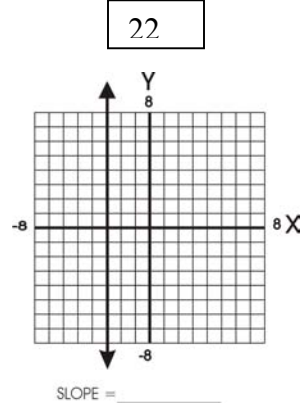
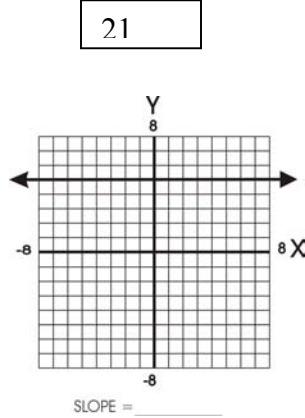
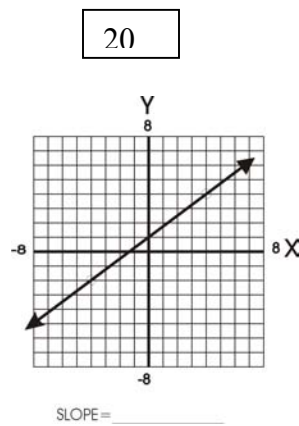


18: The following graph shows data from a recent train ride from Chicago to St. Louis. At what rate did the train travel?



- 19 At 2:00 PM, Perry rented a mountain bike from the Slick Rock Cyclery. He returned the bike at 5:00 PM after cycling 18 miles. Perry paid \$12 per our for the rental.
- What was Perry's average speed in miles per hour?
 - What was the rental rate in dollars per hour?
 - What was his rate in dollars per mile/

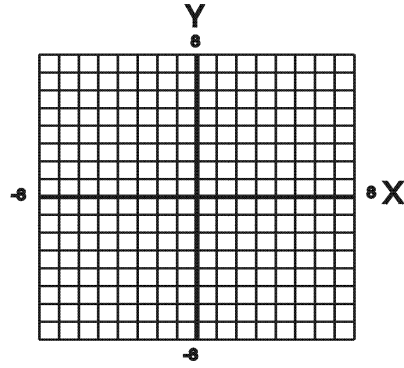
Prob 20, 21 and 22 Write the slope of the line below each of the following three graphs.



23: Find the slope of the line containing the following pair of points $(-2,4)$ and $(3,0)$

24 Draw a line that has the given slope and y-intercept:

Slope = $-\frac{6}{7}$, and y-intercept $(0, 5)$



25 Find the slope-intercept **equation** of the line that has the given characteristics

Slope: $-\frac{15}{11}$ and y-intercept $(0,-9)$

26: Are the lines described by this pair of equations parallel? $2x + 2 = y$
 $2y = 4x - 9$

27: Multiply: $w^4 \cdot w^2$

28: Divide and simplify $\frac{5^6}{5^3}$

29 Divide and simplify $\frac{3^8 m^5}{3^3 m^3}$

30: Evaluate n^0 when $n = -18$

31: Rewrite the following polynomial in proper order then identify the terms, the coefficients of each term, the degree of each term and, finally, state the degree of the polynomial. $x^2 - 6 + x^6 - 6x^3$

(a) Polynomial in proper order: _____

(b) Identification

TERM	COEFFICIENT	DEGREE	DEG OF POLY

32: Evaluate the following polynomial for $x = 4$ $2x^2 - 3x + 6$

33: Simplify $\left(\frac{m^3}{b^2}\right)^3$