

Chapter 3
Form C

1. Determine if the ordered pair $\left(2, \frac{1}{4}\right)$ is a solution of $\frac{1}{8}x + 3y = 1$.

1. _____

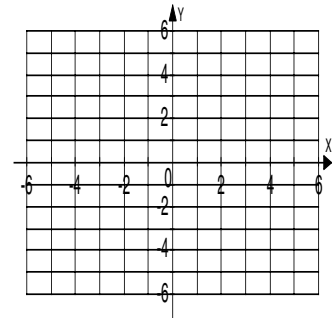
2. Complete the table of values for $y = \frac{2}{3}x + 1$.

2.

x	$y = \frac{2}{3}x + 1$	(x, y)
0		
-2		
-6		

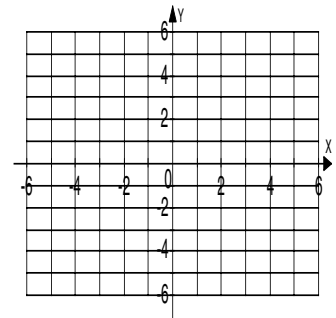
3. Graph the equation $y = \frac{2}{3}x + 1$ using the ordered pairs from problem 2.

3.



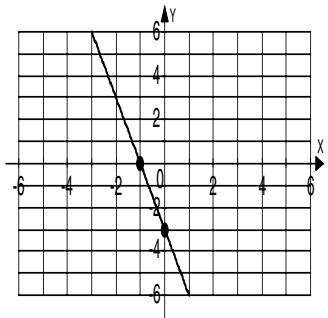
4. Graph $y = x + 3$.

4.



5. For the graph shown, identify the:

- (a) x -intercept
- (b) y -intercept.



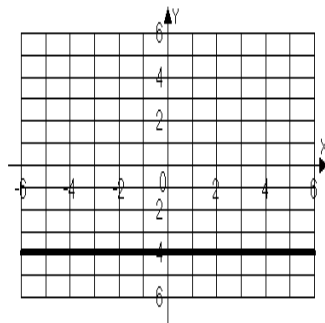
5a. _____

b. _____

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6. For the graph shown, identify the:
(a) x -intercept
(b) y -intercept.

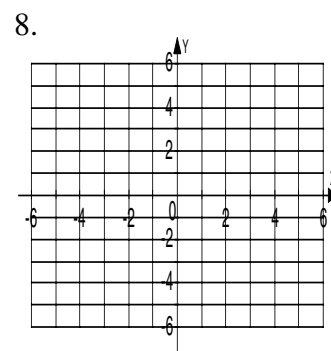


- 6a. _____
b. _____

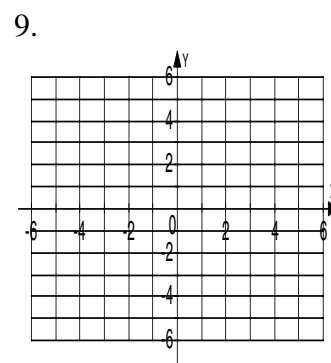
7. For the equation $6x - 4y = 10$, identify the:
(a) x -intercept
(b) y -intercept.

- 7a. _____
b. _____

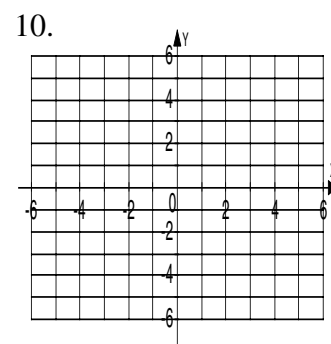
8. Graph the equation $6x - 4y = 10$ using the x and y - intercepts found in problem 7.



9. Graph the equation $-3x - y = 2$.



10. Graph the equation $y = 2x$.

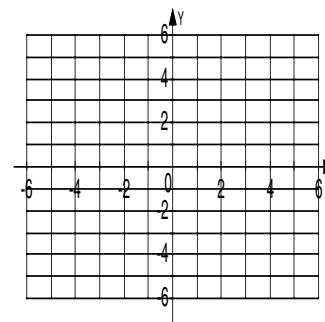


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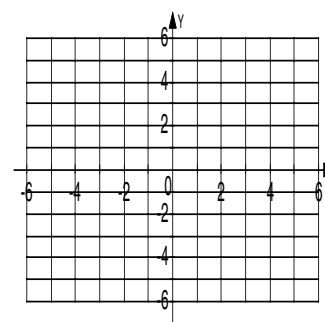
11. Graph the equation $x = 3$.

11.



12. Graph the equation $y = -4$.

12.



For problems 13 – 14, calculate the slope of the line passing through the given points.

13. $(-4, 1)(3, -5)$

13. _____

14. $\left(4, \frac{2}{3}\right)\left(1, \frac{2}{3}\right)$

14. _____

15. For the equation $5x - 4y = 8$, find the:

15a. _____

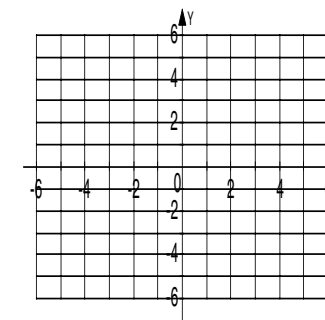
a. slope

b. y-intercept

b. _____

16. Use the slope and y-intercept found in problem 15 to graph $5x - 4y = 8$.

16.



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17. Are the lines $2x - 4y = 6$ and $4x - 8y = 6$ parallel? 17. _____

18. For the line passing through $(2, 0)$ and $(5, 3)$ write the equation of the line in: 18a. _____

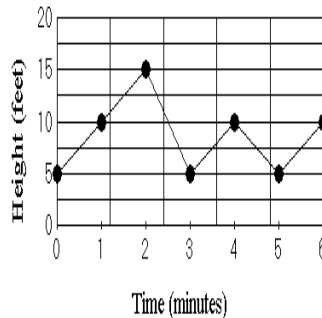
(a) point-slope form. b. _____

(b) slope-intercept form.

19. A plain cheese pizza costs \$8. Each additional topping costs \$0.75. Write the equation of the line that models the cost, y , in dollars, of a pizza with x toppings. 19. _____

20. For the equation you found in problem 18, what does the ordered pair $(2, 9.50)$ represent? 20. _____

The following graph shows the height y of a canary, x minutes after its escape from its cage. Use the graph for problems 21 –22.



21. a. What is the y-intercept? 21. _____
b. In terms of time and height, interpret the meaning of this intercept.

22. a. At what time did the maximum height occur? 22. _____
b. What was the maximum height?

23. The equation of a line is given as $y = \frac{2}{5}x + 9$. Find the slope that is (a) parallel to the line with the given equation and (b) perpendicular to the line with the given equation. 23a. _____
b. _____

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24. Find the equation of the line in (a) point-slope form and (b) slope-intercept form that passes through $(-4, -5)$ and $(-1, 4)$.
24a. _____
b. _____

25. Find the equation of the line in (a) point-slope form and (b) slope-intercept form that passes through $(2, 5)$ and is parallel to $6x - 4y = 8$.
25a. _____
b. _____