

**Your work will be collected. This will be an extra grade in your quarter 1 average. It cannot hurt your grade; it can only help it. There will be NO extensions to the due date once announced. It will be due in the second week of school, on August 22 or 23, 2024 depending on your A-day or B-day class schedule.**

**Follow these directions:**

- **Work down the page, not across.**
- **Keep your work neat.**
- **Leave spaces between problems.**
- **When you do work on a piece of paper, always start with writing the problem.**
- **There are some numbers missing. Just skip them and go by the numbers on the paper.**
- **At the top of the paper, write the following: Your first and last name, the math teacher you are assigned to, and the class period you are assigned to.**

*Simplify using the Order of Operations. Show all steps.*

Need help? Watch a video. Click here - <https://youtu.be/dAgfnK528RA>.

1.  $3(5 + 2) - 8 + 2(3)$

2.  $10 + 9^3 \cdot 4 + 2$

3.  $3^3 + 5^2$

4.  $(7^2 - 5) \cdot 2$

5.  $3^2 + 7(2 + 3) - 1$

*Simplify showing all steps. (Rewrite any improper fraction answers as a mixed number). Need help? Watch a video. Click here - <https://youtu.be/5juto2ze8Lg>*

6.  $\frac{1}{3} + \frac{2}{5}$

7.  $\frac{3}{5} - \frac{5}{6}$

8.  $\frac{2}{3} \cdot \frac{5}{6}$

9.  $\frac{3}{4} \div \frac{1}{2}$

10.  $\frac{2}{3} + \frac{1}{2} \cdot \frac{3}{4}$

*Simplify showing all steps.* Need help? Watch a video.

Click here - [https://youtu.be/\\_BgbIvF90UE](https://youtu.be/_BgbIvF90UE) for addition/subtraction. Click here - [https://youtu.be/K\\_tPbVPfHgk](https://youtu.be/K_tPbVPfHgk) for multiplication/division.

11.  $12(-5)$

14.  $22 + (-8)$

12.  $-90 \div (-9)$

15.  $(-3)^2 + 8 - 10(-2)$

13.  $-15 - (-6)$

*Simplify showing all steps.*

Need help? Watch a video. Click here. <https://youtu.be/DKC74YKJpNY>

16.  $2x + 3 - x$

19.  $3xy + 2x + 5y - x$

17.  $2y + 3y - 2 + 5$

20.  $3(x + 1) - 2x$

18.  $3x + 2y - 5 + 3y - 2x$

*Evaluate the expression for the given values. Show all steps.*

Confused? Watch this video. [https://youtu.be/OF2GtlinL\\_s](https://youtu.be/OF2GtlinL_s)

21.  $x + y - z$  for  $x = -3$ ,  $y = 2$ , and  $z = -9$

22.  $2x + 2y$  for  $x = -2$ ,  $y = 5$

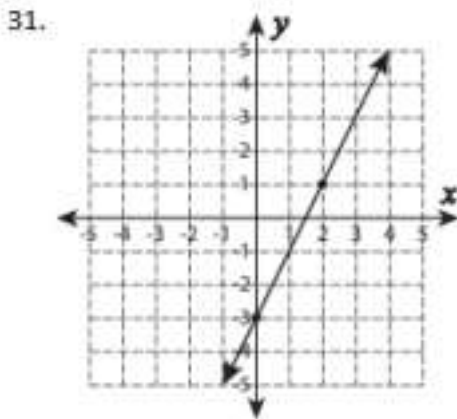
23.  $xy - 3x$  for  $x = 4$ ,  $y = -8$

24. John is going to fertilize his lawn. His lawn is a rectangle that measures 240 feet by 82 feet. The amount of fertilizer required is 0.03 ounces per square foot. a. Find the area of the lawn.

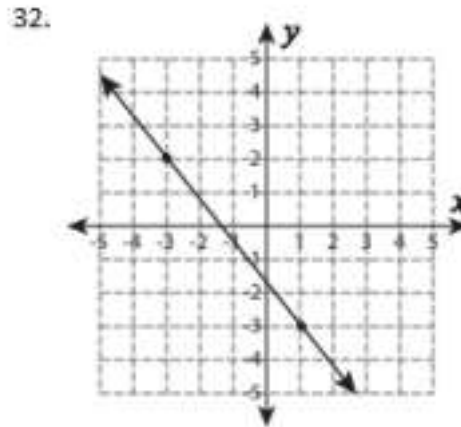
b. How much fertilizer does John need to buy?

Find the slope of the lines on the graphs.

Find help here: <https://www.youtube.com/watch?v=AqOsf9R7JHA>



Slope = \_\_\_\_\_



Slope = \_\_\_\_\_

Find the slope between the two points.

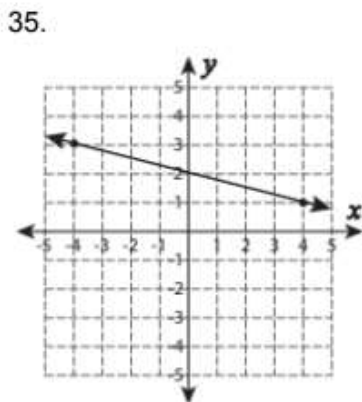
Need help? Check here: <https://www.youtube.com/watch?v=8trWFtwyUMU>

33.  $(-2, 10), (-2, -15)$

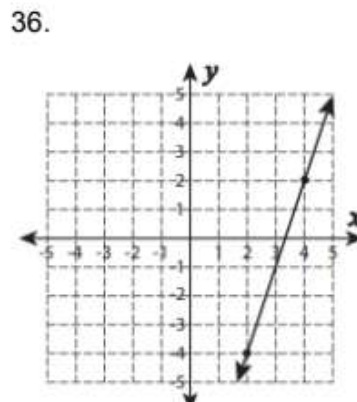
34.  $(-15, 10), (16, -7)$

Name the y-intercept on each graph below.

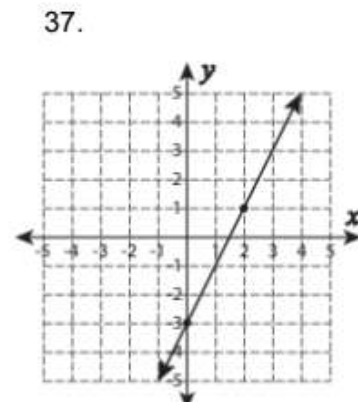
Need assistance? Watch this video: <https://www.youtube.com/watch?v=A65Ok-Q8C7s>



intercept: \_\_\_\_\_



y - intercept: \_\_\_\_\_



y - intercept: \_\_\_\_\_

Find the slope in each equation.

Help is here! [https://www.youtube.com/watch?v=Z65mz\\_8DQ0](https://www.youtube.com/watch?v=Z65mz_8DQ0)

38.  $y = -\frac{2}{3}x - 1$

39.  $x = 1$

40.  $y = -5x - 1$

41.  $2x + 3y = 9$

Find the y-intercept in each equation.

42.  $y = \frac{1}{4}x + 1$

43.  $y = x$

44.  $y = -2x + 2$

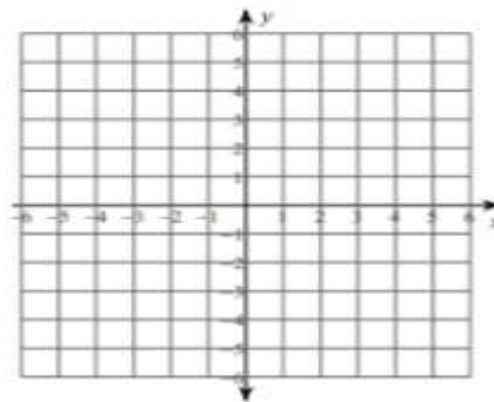
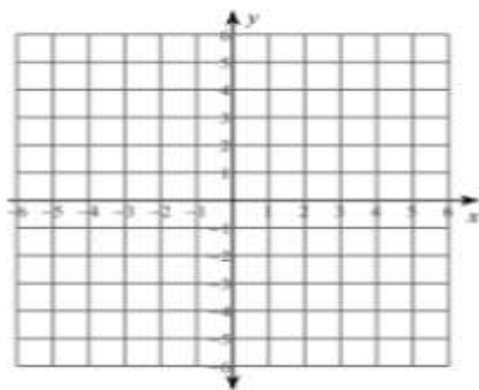
45.  $y = 4$

Graph the line for each equation.

Forgot how? Look here: <https://www.youtube.com/watch?v=vGNsmUKEQ9c>

46.  $y = \frac{3}{5}x - 4$

47.  $y = -3x + 1$



48.  $y = \frac{5}{3}x$

