

Worksheet 3.R: Other Forms of Linearity Review | Chapter 3

Learning Goal: I can write an equation in point-slope form.

1. Write an equation in point-slope form and slope intercept form for the line that passes through $(-3, -5)$, slope = 2

1. Point-Slope: _____ Slope Intercept: _____
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2. Write an equation in point-slope form and slope intercept form for the line that passes through $(1, -1)$, and $(2,0)$

2. Point-Slope: _____ Slope Intercept: _____
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3. Write an equation in point-slope form and slope intercept form for the line that passes through $(6, -6)$, slope of 2

3. Point-Slope: _____ Slope Intercept: _____
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4. Write an equation in point-slope form and slope intercept form for the line that passes through $(-5,9)$ and $(1,3)$

4. Point-Slope: _____ Slope Intercept: _____
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5. Write an equation in point-slope form and slope intercept form for the line that passes through $(0,1)$ and $(2,5)$

5. Point-Slope: _____ Slope Intercept: _____
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Learning Goal: I can find the x- and y-intercepts of a linear equation. (8.EE.8c)

6. State the x- and y-intercepts of the function:

$$-\frac{1}{4}x - \frac{1}{3}y = 12$$

7. State the x- and y-intercepts of the function:

$$x + y = 1$$

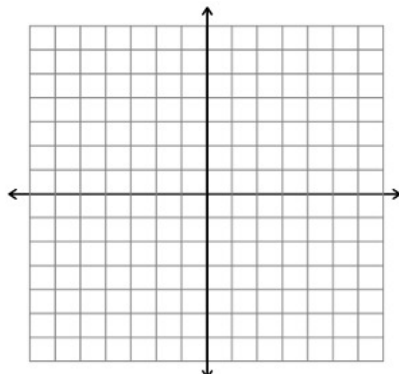
8. State the x- and y-intercepts of the function:

$$6x + 2y = -18$$

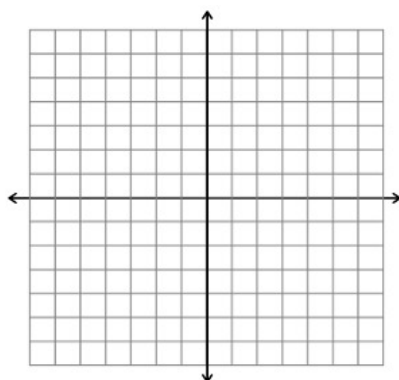
Learning Goal: I can solve a system of equations by graphing. (8.EE.8a, b, c)

Solve each system of equation by graphing.

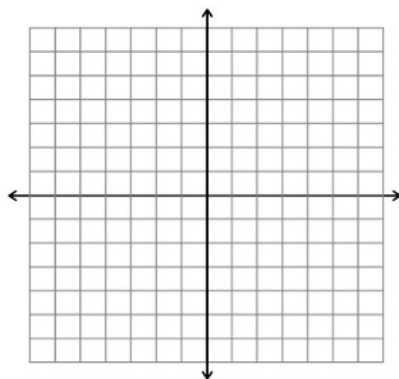
9. $y = 2x$
 $y = x + 1$



10. $y = x + 3$
 $y = -2x - 3$

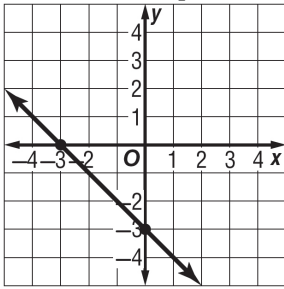


11. $y - 6 = 2x$
 $y = 2(x + 1) + 4$



Learning Goal: I can write a linear equation from a table, graph, and a real-world situation. (8.EE.8c)

12. Write the point-slope form of an equation for the line graphed.



13. The table shows the temperature at certain hours. Assuming the temperature change is linear, write an equation in point-slope form to represent the temperature y at hour x .

Hour	Temperature (°F)
1	81
2	87
3	93

14. After 2 hours, a car travels 65 miles. After 2.25 hours in the same trip, the car travels 71.25 miles. Write an equation in point-slope form to represent the distance y of the car after x hours.

Learning Goal: I can write a system of linear equations.

15. Two small pitchers and one large pitcher can hold 9 cups of water. One large pitcher minus one small pitcher constitutes 3 cups of water. How many cups of water can each pitcher hold? Write a system of equations to represent the situation.