Activity 2.1: Linear Equations & Graphs

A

Name: _____ Partner's name: _____ Date: _____

Directions: Answer each question about lines. Write equations in slope-intercept form unless told otherwise. Problem 7 uses a graph. Graphs are drawn accurately.

Work alone, then compare after each problem. If answers differ, find the mistake together.

1

Find the slope of the line through $(2, -1)$ and $(5, 8)$.

Answer: _____ Match? ☐ Yes ☐ No

2

Write the equation of the line with slope -2 through $(1, 5)$.

Answer: _____ Match? ☐ Yes ☐ No

3

Write $3x + 2y = 12$ in slope-intercept form.

Answer: _____ Match? ☐ Yes ☐ No

4

Write the equation of the line through $(4, 1)$ parallel to $y = 2x - 3$.

Answer: _____ Match? ☐ Yes ☐ No

5

Write the equation of the line through $(2, 3)$ perpendicular to $y = -\frac{1}{2}x + 1$.

Answer: _____ Match? ☐ Yes ☐ No

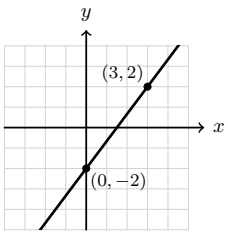
6

Find the x-intercept of $2x - 3y = 12$.

Answer: _____ Match? ☐ Yes ☐ No

7

Write the equation of the line shown.



Answer: _____ Match? ☐ Yes ☐ No

8

A phone plan costs \$20 per month plus \$5 per GB of data. What is the cost for 4 GB in one month?

Answer: _____ Match? ☐ Yes ☐ No

Activity 2.1: Linear Equations & Graphs

B

Name: _____ Partner's name: _____ Date: _____

Directions: Answer each question about lines. Write equations in slope-intercept form unless told otherwise. Problem 7 uses a graph. Graphs are drawn accurately.

Work alone, then compare after each problem. If answers differ, find the mistake together.

1

Find the slope of the line through $(0, 4)$ and $(2, 10)$.

Answer: _____ Match? ☐ Yes ☐ No

2

Write the equation of the line through $(0, 7)$ and $(3, 1)$.

Answer: _____ Match? ☐ Yes ☐ No

3

Write $6x + 4y = 24$ in slope-intercept form.

Answer: _____ Match? ☐ Yes ☐ No

4

Write the equation of the line through $(4, 1)$ parallel to $4x - 2y = 6$.

Answer: _____ Match? ☐ Yes ☐ No

5

Write the equation of the line through $(1, 1)$ perpendicular to $x + 2y = 8$.

Answer: _____ Match? ☐ Yes ☐ No

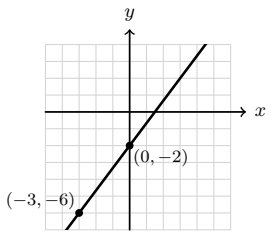
6

Find the x-intercept of $y = \frac{2}{3}x - 4$.

Answer: _____ Match? ☐ Yes ☐ No

7

Write the equation of the line shown.



Answer: _____ Match? ☐ Yes ☐ No

8

A phone plan costs \$30 per month plus \$2.50 per GB of data. What is the cost for 4 GB in one month?

Answer: _____ Match? ☐ Yes ☐ No