

Skills Practice

Name _____ Date _____

Pump It Up Standard Form of Linear Functions

Vocabulary

Give an example of each key term.

1. standard form of a linear equation
2. slope-intercept form of a linear equation

Problem Set

For each linear equation written in standard form, calculate the x - and y -intercepts. Use the intercepts to graph the equation.

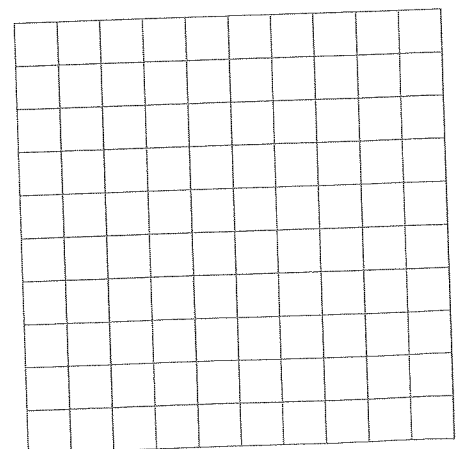
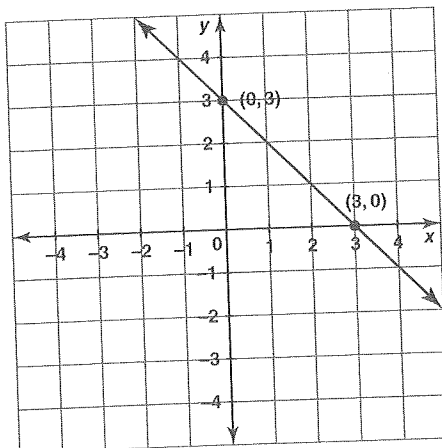
1. $x + y = 3$

$$\begin{aligned}x + 0 &= 3 & 0 + y &= 3 \\x &= 3 & y &= 3\end{aligned}$$

x -intercept = 3; y -intercept = 3

2. $x + y = -2$

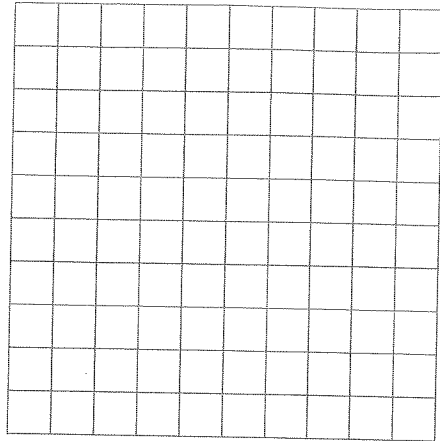
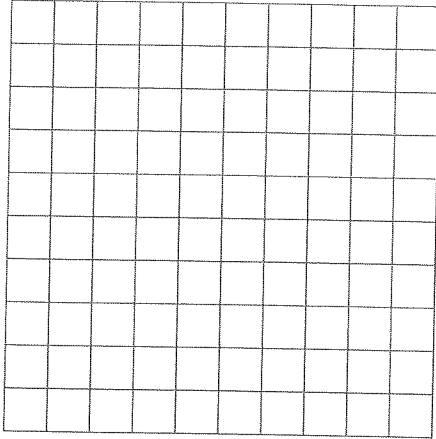
© 2010 Carnegie Learning, Inc.



3. $2x + 3y = 6$

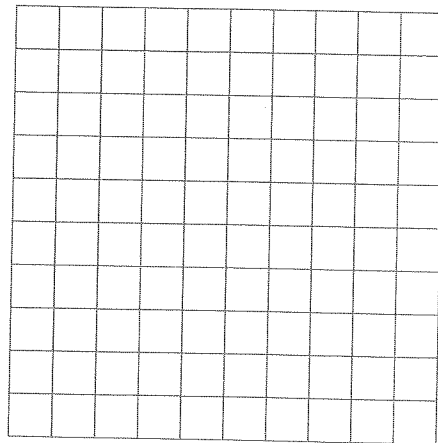
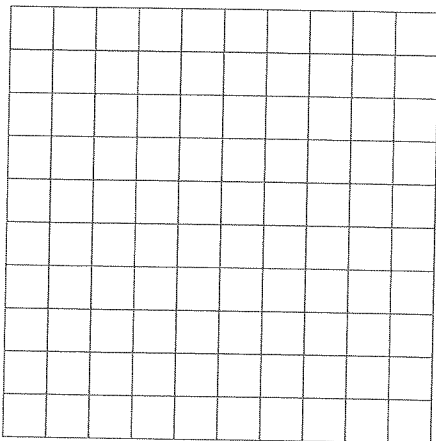
4. $x + 2y = 4$

1



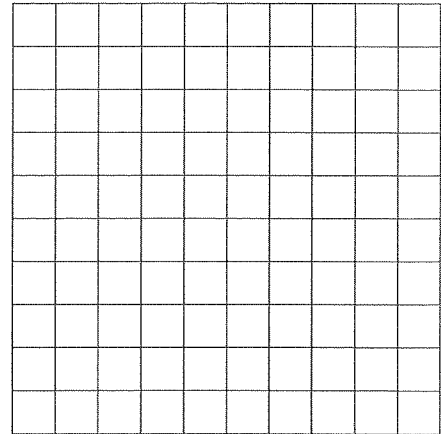
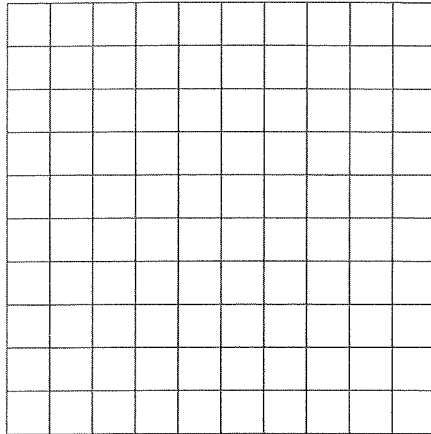
5. $-2x + 5y = 10$

6. $3x - 4y = 12$



7. $2x - y = 3$

8. $-x + 3y = 5$



Rewrite each linear equation in slope-intercept form.

9. $x + y = 2$

$y = -x + 2$

10. $-x + y = -1$

11. $2x - y = 5$

12. $2x + y = 3$

13. $2x + 3y = 12$

14. $5x - 3y = 15$

15. $-3x - 2y = 1$

16. $-x - 5y = 10$

Rewrite each linear equation in standard form.

17. $y = 2x - 3$

$-2x + y = -3$

18. $y = -4x + 5$

1

19. $y = \frac{1}{3}x + 4$

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

21. $y = -\frac{5}{4}x - \frac{1}{6}$

22. $y = \frac{4}{15}x + \frac{5}{9}$