

3.5 Equations of Lines CYU

Use when you get it right all by yourself

S Use when you did it all by yourself, but made a silly mistake

H Use when you could do it alone with a little help from teacher or peer

G Use when you completed the problem in a group

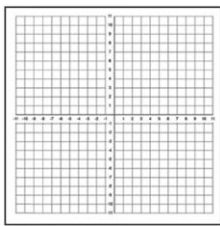
X Use when a question was attempted but wrong (get help)

N Use when a question was not even attempted

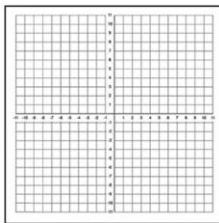
| CONCEPTS | BASIC | INTERMEDIATE | ADVANCED |
|----------------------------------------|---------|---------------|----------|
| Graphing slope-intercept form | 1, 2, 3 | 4 | 5 |
| Writing slope-intercept form | 6, 7, 9 | 8, 10, 11, 12 | 13 - 15 |
| Writing point-slope form | 11 | 12 | 13 - 15 |
| Writing standard form | | 11, 12 | 13 - 15 |
| Finding slope from two points | 13 - 15 | | |
| Writing horizontal & vertical lines | 16, 17 | | |
| Writing parallel & perpendicular lines | | 18 - 21 | 18 - 21 |

Use slope-intercept form to graph each equation. Show work to earn full credit.

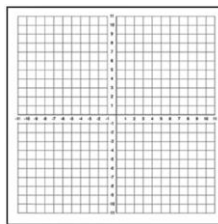
1. $y = -4x - 1$



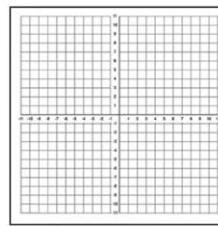
2. $y = \frac{1}{4}x - 3$



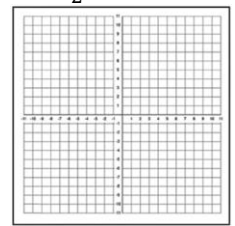
3. $y = -6x$



4. $3x - 4y = 4$



5. $x = \frac{3}{2}y$



Write an equation of the line with each given slope and y-intercept.

6. $m = 5$ & $b = 3$

7. $m = 2$ & $b = \frac{3}{4}$

8. $m = 0$ & $b = -8$

9. $m = -\frac{4}{5}$ & $b = 0$

10. $m = \text{undefined}$ & $b = 2$

Find an equation of each line with the given slope that passes through the given point. Write the equation in all three forms.

11. $m = 6$ & $(2, 2)$

point-slope form: _____

slope-intercept form: _____

standard form: _____

12. $m = -\frac{1}{2}$ & $(-3, 0)$

point-slope form: _____

slope-intercept form: _____

standard form: _____

Find an equation of the line passing through each pair of points. Write the equation in standard form.

13. $(3, 2)$ & $(5, 6)$

14. $(6, 2)$ & $(8, 8)$

15. $(-4, 0)$ & $(6, -1)$

Write an equation of each line.

16. vertical through $(0, 2)$

17. horizontal through $(1, 4)$

18. parallel to $y = 5$, through $(1, 2)$

19. perpendicular to $x = -3$ through $(-2, 5)$

20. parallel to $x = 0$, through $(-5, 0)$

21. perpendicular to $y = -4$ through $(0, -3)$

CYU Reflection: How far can you go: basic, intermediate, or advanced?

Rate your mastery level!

How confident are you with the skills this CYU covered? Circle the score you would give yourself.

