

Chapter 6 — Graphing Linear Equations and Slope

Worksheet A: Guided Practice

Name: _____ Grade: _____ Date: _____

1. What is the slope of a horizontal line? Give an example equation.

A horizontal line has no rise.

2. Graph: $y=x+2$

Start at (0,2). The slope is 1/1.

3. Find the slope through: (0,0) and (3,6)

Use rise over run.

4. Plot (3,-5). Draw a line through it with slope 2. Name one more point.

Move up 2 and right 1.

5. Identify m and b: $y=3x-2$

In $y=mx+b$, the coefficient of x is m .

6. Graph: $y=-2x+3$

Start at (0,3). The slope is $-2/1$.

7. Find the slope through: (2,5) and (6,1)

Use the same point order in numerator and denominator.

8. A line rises 6 units over a run of 3 units. What is the slope?

Slope equals rise divided by run.

9. Identify m and b: $y = -x + 4$

Read $-x$ as $-1x$.

10. Graph: $x = 2$

Every point has $x = 2$.

11. A ramp rises 2.4 m over a 6 m horizontal run. Find the slope.

Write slope as rise/run.

12. A line passes through $(0, -4)$ and has slope 3. Name two more points.

Move up 3 and right 1.

13. Are these lines parallel? $y=2x+5$ and $y=2x-3$ Explain.

Compare the slopes.

14. Find the slope of a line perpendicular to $m=3$.

Use the negative reciprocal.

15. Is $(4,9)$ on $y=2x+1$? Show the check.

Substitute $x=4$.
