

Finding the slope of parallel and perpendicular lines from points

Name _____

Find the slope of a line that would be parallel to the function given.

1. Linear Function 1: $(-2, -1)$ and $(2, 1)$

2. Linear Function 2: $(0, 9)$ and $(2, 5)$

3. Linear Function 3: $(0, 7)$ and $(20, 3)$

4. Linear Function 4: $(0, 5)$ and $(12, -15)$

Find the slope of a line that would be perpendicular to the function given.

5. Linear Function 5: $(2, 3)$ and $(4, -15)$

6. Linear Function 6: $(0, 0)$ and $(10, -16)$

7. Linear Function 7: $(-2, 0)$ and $(4, 9)$

8. Linear Function 8: $(-1, -5)$ and $(2, 13)$

Would the two functions given be described as parallel, perpendicular, or neither?

9. Function A: $(-1, 1)$ and $(1, 9)$

Function B: $(0, 0)$ and $(4, -1)$

10. Function C: $(2, 4)$ and $(6, 12)$

Function D: $(-2, 5)$ and $(2, 7)$

Answer Key.

1. $m = \frac{1}{2}$

2. $m = -2$

3. $m = -\frac{1}{5}$

4. $m = -\frac{5}{3}$

5. $m = -\frac{1}{3}$

6. $m = \frac{5}{8}$

7. $m = -\frac{2}{3}$

8. $m = -\frac{1}{6}$

9. perpendicular

10. neither