

Skill: Using Slope

Investigation 4

Moving Straight Ahead

For Exercises 1–4, determine if the line that represents each equation has the same slope as the equation $y = 2x - 4$.

1. $y = 2x + 4$ 2. $y = -2x + 3$ 3. $y = 4x - 2$ 4. $y = 3x - 4$

5. Which hill would it be easiest to push a heavy cart up, one with a slope of $\frac{1}{2}$, $\frac{1}{6}$, 3, or 5? Explain.

6. Which ski run would probably give you the greatest speed down a hill when you are skiing, one with a slope of $\frac{1}{8}$, $\frac{1}{4}$, 1, or 2?

7. Which roof would be the most dangerous for a roofer, one with a slope of $\frac{1}{16}$, $\frac{1}{10}$, $\frac{1}{2}$, or $\frac{3}{2}$?

8. Which of the slopes from Exercise 7 would be the easiest for the roofer?

Draw a line with the given slope through the given point.

9. $P(5, 1)$, slope = $-\frac{1}{3}$

10. $K(-2, 4)$, slope = 3

