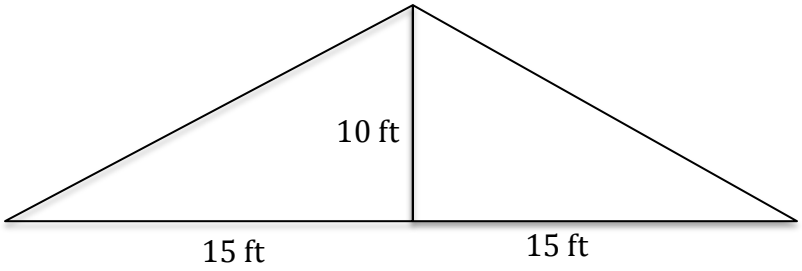
Key Concepts/Learning Goals:

- A line with a positive slope goes _____ from left to right; a line with a negative slope goes _____ from left to right.
- A _____ line has a slope of **zero.**
- Parallel lines have the same _____
- Ignoring the sign on the coefficient of *x*, the greater the coefficient of *x*, the _____the line.

EXAMPLE 1: **Positive and Negative Slopes**

Determine the slope of the left side of the roof.



REMEMBER

slope is m

$$m = \frac{rise}{run}$$

SOLUTION

EXAMPLE 2: **Positive and Negative Slopes**

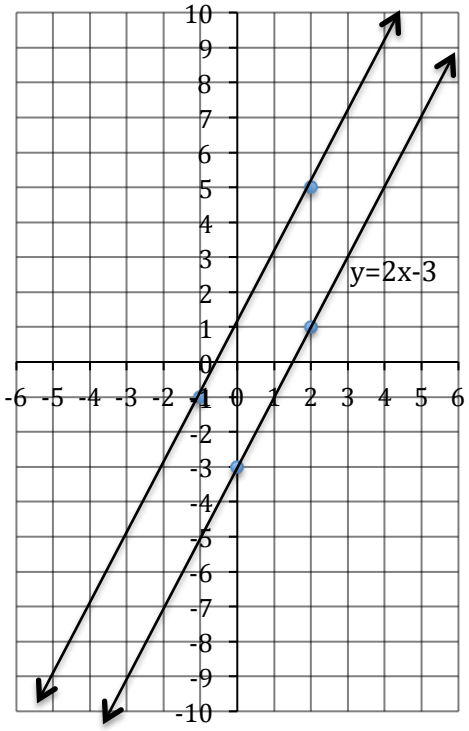
Determine the slope of the right side of the roof that is shown in the example above.

SOLUTION

Describe the difference between the positive and negative slopes.

EXAMPLE 3: PARALLEL LINES

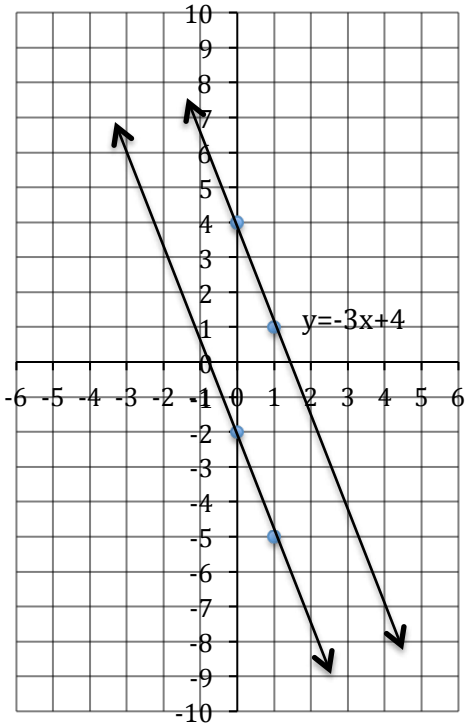
a) Write the equation of the line that is parallel to labeled line.



Recall: y=mx+b
m is the slope, b is the y-intercept

SOLUTION

b) Write the equation of the line that is parallel to labeled line.



Recall: y=mx+b
m is the slope, b is the y-intercept

Solution

Practice Questions
1, 2 (a, c, e, g), 3(a, c), 4(a, c), 5(a, c), 6(a, b, d), 8(a, b, c, d), 9