**Find the slope of the line that passes through each pair of points.**

1) (–5, –3), (7, –2) 2) (4 , 3), (–6 , 3)

Write the linear equation in **slope-intercept** form.

3) –14x + 7y = 21 4) 5x – 2y = 16

**Graph each equation.**

5)  6) y = 2x

Write an equation for each line in **point-slope** form then distribute to be in **slope-intercept** form.

7) Passes through the point 8) Passes through the

(**–**3,-4) with a slope of 2. points (6,–2) and (5, 1).

Write each equation in **slope-intercept** form. Then graph the equation.

9) y + 8 = –4(x - 3) 10) 

11) You would like to record a song in a music studio. It costs an initial fee of $27 plus $138 per hour. Write a linear model in **slope-intercept form** that relates the total cost of recording a song (y), with the number of hours (x), you might spend in the studio.

12) A construction company charges $15 per hour for debris removal, plus a one-time fee for the use of a trash dumpster. The total fee for 9 hours of service is $195. Write the point-slope form of an equation relating the total fee *y* to the number of hour *x*.

13) It is 76°F at the 6000-foot level of a mountain, and 49°F at the 12,000-foot level of the mountain.

a) Write a linear equation to find the temperature *T* at an elevation *e* on the mountain, where *e* is in thousands of feet.

b) Predict the temperature at the 10,000-foot level of the mountain.

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