Teacher: Lee

## Assignment: Linear functions

The value of x which makes  $\frac{2}{3} \left( \frac{1}{3} x - 4 \right) = \frac{1}{9} \left( \frac{3}{4} x - 2 \right)$  true is

2 The solution to 9(x + 2) = 5 - 2(x - 1) is

$$\begin{array}{ccccc}
1 & -4 \\
2 & -1 \\
3 & -\frac{5}{6} \\
4 & \frac{5}{6}
\end{array}$$

3 Last month, the yearbook committee sold candy bars to raise money for the senior class. The function P(c) = 1.50c - 25 represented the profit, P(c), the yearbook committee earned selling the candy bars. Sales were strong, so the committee increased the price of each candy bar by 25 cents this month. Which function represents the yearbook committee's profits this month?

$$1 P(c) = 0.25c - 25 
2 P(c) = 1.50c 
3 P(c) = 1.50c - 55 
4 P(c) = 1.75c - 25$$

4 Kendal bought *x* boxes of cookies to bring to a party. Each box contains 12 cookies. She decides to keep two boxes for herself. She brings 60 cookies to the party. Which equation can be used to find the number of boxes, *x*, Kendal bought?

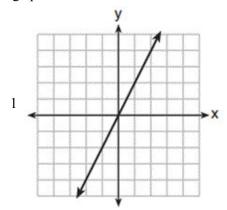
$$\begin{array}{rrr}
1 & 2x - 12 = 60 \\
2 & 12x - 2 = 60 \\
3 & 12x - 24 = 60 \\
4 & 24 - 12x = 60
\end{array}$$

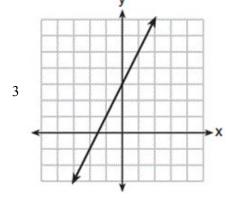
5 The value of the x-intercept for the graph 2x - 5y = 30 is

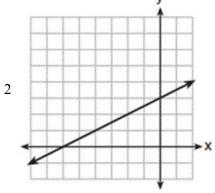
$$\begin{array}{r}
 1 - \frac{2}{5} \\
 2 - 6 \\
 3 15 \\
 4 \frac{2}{5}
 \end{array}$$

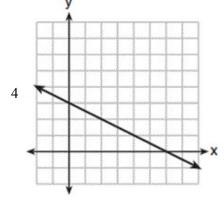
- 6 What is the slope of the line that passes through the points (2,5) and (7,3)?
- 7 Which equation is equivalent to x + 2y = 6?

  - 1 y = -x + 62  $y = -\frac{1}{2}x + 6$ 3 y = -x + 34  $y = -\frac{1}{2}x + 3$
- Which graph shows a line where each value of y is twice x?









- What is the slope of the line represented by the equation 4x + 3y = 7?
- What is an equation of the line that passes through the points (2, 1) and (6, -5)?
  - 1  $y = -\frac{3}{2}x 2$
  - $2 y = -\frac{3}{2}x + 4$  $3 y = -\frac{2}{3}x 1$

  - $4 y = -\frac{2}{3}x + \frac{7}{3}$