Linear Functions
Review

1. Graph the following equations using their x and y intercepts:

a) $y = 2x + 6$
b) $2y - 8x = 12$

2. Determine the slope of the line that passes through the following points:

a) (3, 5) , (7,10)
b) (2,3), (-5, 17)

3. Suppose y varies directly as x. For each of the following relationships, write a direct variation equation and then solve for the given variable.

a) If $y = 25$ when $x = 5$, find y when $x = 7$
b) If $y = 12$ when $x = 8$, find x when $y = 33$

4. Write an equation for term *n* of each of the following arithmetic sequences, then find the next 3 terms in the sequence

a) -2, 2, 6, 10, 14 …
b) 5, 12, 19, 26, 33 …

5. Determine the equation of each of the following arithmetic sequences in terms of *n.* Then state whether the function is proportional or unproportional.

a) 0, 3, 6, 9, 12
b) 8, 16, 24, 32