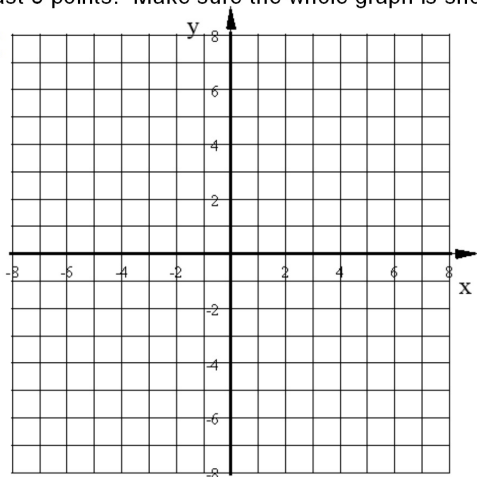1. Graph using at least 5 points. Make sure the whole graph is shown.

$y = -3|x + 3| - 2$

2. a) Write a direct variation equation that contains the following point: (4, -10)

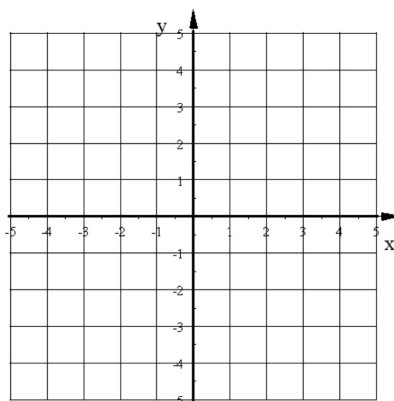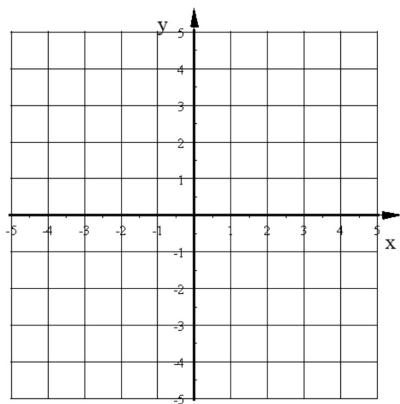3. Is each equation a direct variation?

a) $8 + 7x - 5 = -4y + 3$

b) $3y + 4 = 2x - 4$

4. Graph each direct variation.

a) $y = -2x$

b) $y = -\dfrac{1}{4}$

5. The distance you can travel varies directly with the amount of gas in your tank. You can travel 252 miles if you have 8 gallons of gas.

a) Model this situation with a direct variation equation.

b) How many miles can you travel if you have 11 gallons of gas?

c) How many gallons are required to travel 600 miles?