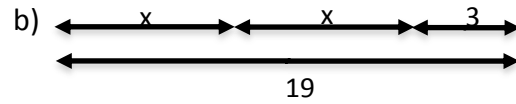
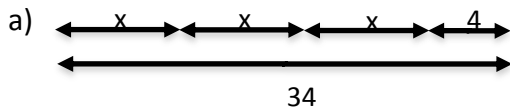


SHOW YOUR WORK FOR ALL PROBLEMS!1) **Write and solve an equation** for the diagrams represented below.

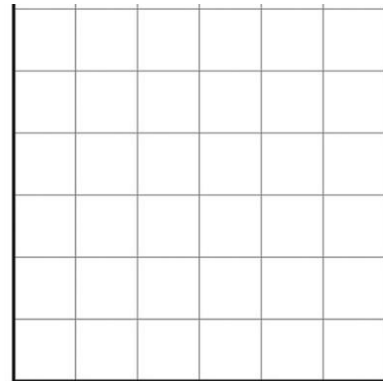
2) Mr. Grinch's doctor has advised him to go on a diet. He currently eats 3,000 calories per day, and his doctor wants him to eat 2,100 calories per day. What is the percent of change?

3) Use the data below to complete the following tasks:

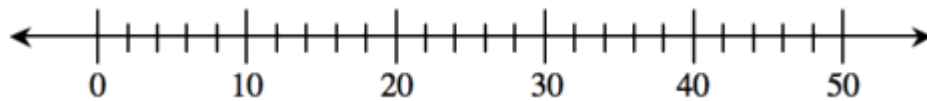
32, 5, 25, 22, 18, 10, 47, 42, 34, 18, 37

a) Make a stem-and-leaf plot (include a key).

b) Make a histogram.



c) Make a box-and-whisker plot.



4) a) $\frac{5}{6} = \frac{x}{42}$

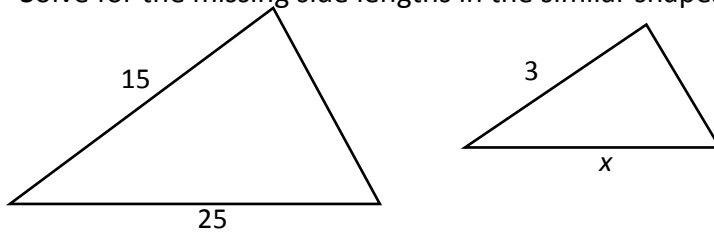
b) $\frac{3}{7} = \frac{39}{x}$

5) Mrs. Wink put \$4500 into a savings account that earns 6% interest. After five years, how much money will she have? Show your work.

- 6) Write and solve an equation for the following problem. **DO NOT** USE THE 5D PROCESS!

Kelli's jump rope is 4 inches longer than two times the length of Michelle's rope. If both their ropes laid end to end measure 100 inches long, how long is Kelli's jump rope?

- 7) Solve for the missing side lengths in the similar shapes below.



- 8) a) $12x - 10 = 50$ b) $-5x + 12 = 42$

c) $\frac{2}{5}x + 1 = x - 5$ d) $\frac{x}{6} + \frac{2x}{3} = 5$

- 9) The math club is hoping to raise \$140 at the Harvest Fair by selling lemonade. They expect to sell about 80 glasses if the weather is good. What should they charge per glass for the lemonade?

- 10) a) 24 is what percent of 50? b) 20% of what number is 36?