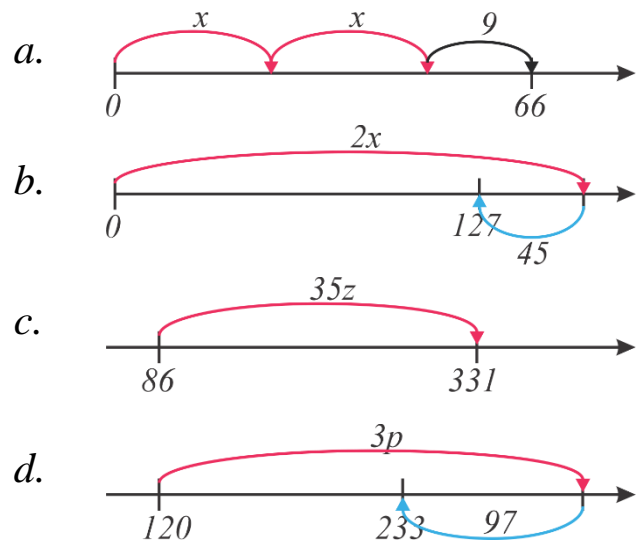Math 4b. Homework 16.

1. Write the following as mathematical expression. If this expression is an equation, solve it.

   a. Sum of the number x and 15 equals to 20.

   b. Product of y and 10.

   c. Difference between three times z and 4 is equal to 12.

   d. Half of the number b is equal to 1.5

   e. Product of the numbers of 5 and x is less than 12.

2. Peter had n dollars to buy lunch. He spent k dollars on a salad and three times as much on a burger. How much money does he have left? Write the expression to solve the problem. Solve the problem for $n = 17, k = 3$.
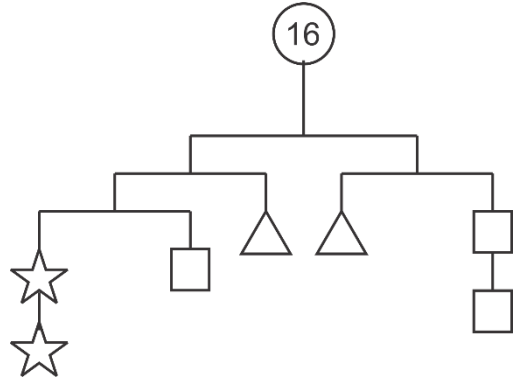
3. Based on the drawing below, write equations and solve them:

a.

x x 9
0 ... 66

b.

$2x$
0 ... 127 45

c.

$35z$
86 ... 331

d.

$3p$
120 ... 233 97

4. There were 624 books in two boxes altogether. When $\frac{1}{3}$ of the books from one box and $\frac{3}{7}$ of the books from another box were sold to the customers, the number of books in each box became equal. How many books there were in each box at the beginning?

5. The mother was 32 years old when her daughter was born, and 35 years old when her son was born. How old is each of them now if their combined ages are 59 years?

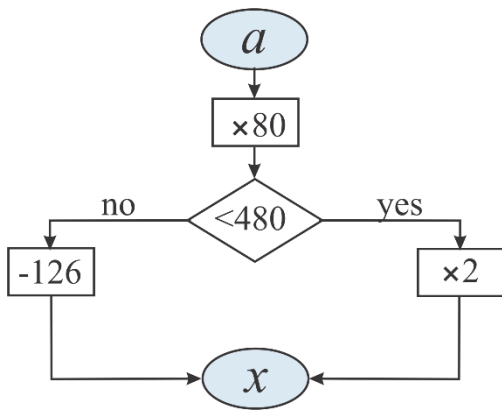6. If the total weight is 16, find the weight of each shape:

7. Without doing actual calculations show that the following statements are true:

   a. $\dfrac{1}{3} + \dfrac{1}{4} > \dfrac{1}{2}$;

   b. $\dfrac{1}{5} + \dfrac{1}{6} + \dfrac{1}{7} + \dfrac{1}{8} > \dfrac{1}{2}$

8. Fill the table using the algorithm;

a	4	5	7	8
x				