

Math 4a. Homework 15.



1. Solve the equations:

a.  $\frac{3}{4} = \frac{x - 9}{16};$

b.  $\frac{32 - y}{24} = \frac{5}{8}$

2. Evaluate by the most convenient way first rewrite the expression without parenthesis:

a.  $3\frac{19}{24} + \left(5\frac{1}{9} + 1\frac{5}{24}\right);$

b.  $7\frac{16}{35} - \left(3\frac{11}{35} + 4\frac{1}{56}\right)$

c.  $\left(1\frac{5}{8} + 4\frac{8}{17}\right) + \left(\frac{9}{17} + 2\frac{3}{8}\right);$

d.  $\left(4\frac{56}{789} + 1\frac{5}{6}\right) - 4\frac{56}{789}$

3. A conveyor has processed 100,000 pizzas in a factory by putting the following ingredients on top of pizzas in this order:

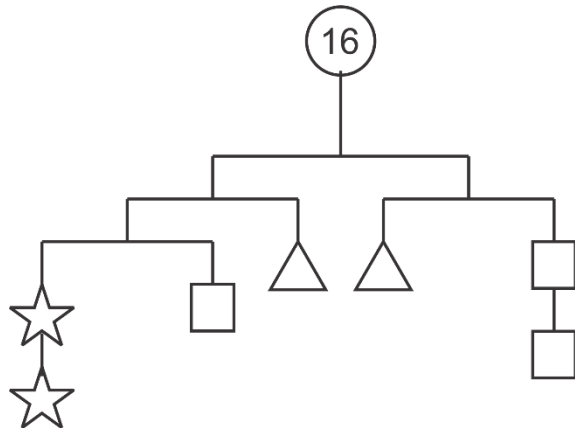
- i. Canadian bacon onto every 8th pizza
- ii. Pieces of pineapple onto every 9th pizza
- iii. Green peppers onto every 12th pizza.

a) How many of the pizzas have all the three toppings?

b) How many of the pizzas have both Canadian bacon and green peppers but not pineapple?

4. On the picture below, every arm of the balance is in equilibrium. (The horizontal bars are suspended at their midpoints.) Identical shapes have identical masses. Total weight is

16. What is the weight of each shape?



5. What number should be placed instead of “?”.

