

1. On a plane 5 points are marked on a straight line and 1 point is marked not on a line. How many different triangles can be drawn?
2. There are 7 points marked on a plane, any three of them do not belong to the same line. How many triangles can be drawn?
3. The volume of the can is 4 liters, which is $\frac{2}{7}$ the volume of the canister and 2% of the volume of the barrel.
 - a) How much more liquid does the barrel hold than the can and canister taken together?
 - b) How many times is the volume of the barrel greater than the volume of the can?
 - c) How many canisters can be poured from a barrel filled to the brim? How much liquid is left?

4. **Write an expression** to answer the question of the problem and find its value for the given values of the variables:

Example:

Alex is t years old, and John is n years older. How many times will Alex be younger than John in 3 years? ($t = 2, n = 10$.)

Alex $\rightarrow t$ years

John $\rightarrow t + n$ years

In three years:

Alex $\rightarrow t + 3$ years

John $\rightarrow t + n + 3$ years

$$\frac{t + n + 3}{t + 3} = \frac{2 + 10 + 3}{2 + 3} = \frac{15}{5} = 3$$

times John is older than Alex.

- a. Antony lives at a distance of a meters from the school. How long will it take him to travel from home to school if he walks at a speed of b m/min? ($a = 800, b = 50$.)
- b. Robert walked through the forest c km, and on the field d km. The whole journey took him t hours. With what speed did he walk if the speed did not change along the way? ($c = 5, d = 1, t = 2$.)

5. Evaluate (answer 26):

$$\left(\frac{0.8 : \left(\frac{4}{5} \cdot 1.25 \right)}{0.84 - \frac{1}{25}} \right)^2 + \left(\frac{\left(1.08 - \frac{1}{25} \right) : 2 \frac{3}{5} : 0.6}{\left(2 \frac{1}{25} - 1 \frac{4}{5} \right) : 1 \frac{4}{5} + (2.6 - 2.6) \cdot 5 \frac{1}{25}} \right)^2$$