

Fraction, Percentage and Ratio Problems



Section A

- 1) Calculate the required fraction of each amount:
 - a) What is $\frac{1}{5}$ of 30?
 - b) Find $\frac{3}{5}$ of 85.
 - c) What is $\frac{2}{7}$ of 280?
- 2) Calculate the given percentage of each amount:
 - a) Find 25% of 70.
 - b) Find 40% of 16.
 - a) Find 65% of 130.
- 3) Divide each amount into the given ratio:
 - a) Share 32 in the ratio 1:3.
 - b) Share 32 in the ratio 3:5.
 - c) Share 55 in the ratio 4:7.

Section B

- 1) Emma has a collection of 300 garden seeds.
 $\frac{1}{5}$ of them are vegetable seeds.
40% are flower seeds.
The rest are divided into fruit and herb seeds in a ratio of 3:2.
How many herb seeds does Emma have?
- 2) A village library has 800 books.
15% of the books are science fiction.
 $\frac{1}{4}$ of the books are non-fiction.
The rest are split between mystery and romance novels in a ratio of 6:4.
Determine the number of romance novels.

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- 3) A bakery makes 560 baked goods a day. 35% of them are croissants. $\frac{2}{7}$ are muffins. The remaining goods are cookies and scones in a ratio of 1:2. How many scones are produced daily?
- 4) Loki has a collection of 45 marbles. $\frac{4}{9}$ of them are blue. 20% are red. The rest are divided between green and yellow marbles in a ratio of 3:5. Work out the number of yellow marbles Loki has.
- 5) On Saturday, a museum was visited by children and adults in the ratio 3:4. $\frac{5}{6}$ of the children bought something from the gift shop. 90 children did not buy anything from the gift shop. The museum has a target of 1300 visitors on a Saturday, did the museum hit the target? You must show how you get your answer.
- 6) During a school sport day, students participated in either indoor or outdoor activities. The ratio of students who participated in indoor activities to outdoor activities was 2:5. $\frac{4}{7}$ of the students who participated in outdoor activities competed in track and field events. 260 students competed in track and field events. There are 700 students at the school in total. Did more than 90% of students participate in sports day activities? You must show how you get your answer.