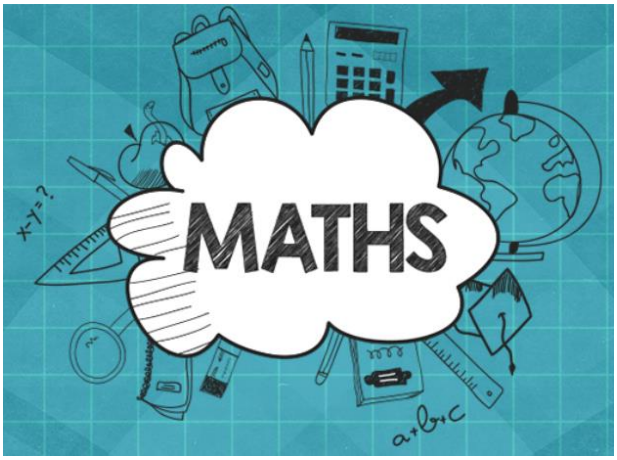

Lesson 4- Consolidation

Fractions of amounts

For this lesson, we will move onto consolidating fractions of amount.

Introduction

When finding a fraction of an amount, the key rule to remember is to divide the amount by the **denominator** and multiply your answer by the **numerator**.

If asked to **increase** or **decrease** an amount by a fraction make sure you add or subtract from the original amount at the end of the question!

Example questions involving fractions of amounts

Example 1 - Finding a fraction of an amount

Find 2/5 of £35.

First find 1/5 by dividing £35 by 5 to get £7.

Now to find 2/5, multiply by 2 to get £7 × 2 = £14.

Example 2 - Increasing or decreasing an amount by a fraction

Increase £240 by 1/6.

£240 ÷ 6 = £40. So 1/6 of £240 is £40.

Since we want to increase the amount by 1/6 we add this on to the original amount of £240. So £240 + £40 = £280.

Depending on how confident you feel, choose 1 task from below:

1 star = Developing

2 stars = Expected

3 stars = Greater Depth

1 star

$\frac{1}{4}$ of £4 $\frac{1}{2}$ of £8 $\frac{1}{3}$ of £6

$\frac{1}{4}$ of £8 $\frac{1}{2}$ of £4 $\frac{1}{3}$ of £9

Circle $\frac{1}{5}$ of the beanbags.

Circle $\frac{3}{5}$ of the beanbags.

What's the same and what's different about $\frac{1}{5}$ and $\frac{3}{5}$?

Find $\frac{1}{5}$ of Joe's marbles.

I have divided the marbles into ☐ equal groups.

There are ☐ marbles in each group.

$\frac{1}{5}$ of Joe's marbles is ☐ marbles.

2 stars

$\frac{2}{3}$ of 21m =

(b) $\frac{3}{4}$ of £24 =

(c) $\frac{4}{5}$ of $25 =

$\frac{5}{6}$ of 36cm =

(e) $\frac{2}{3}$ of 30km =

(f) $\frac{3}{8}$ of £32 =

$\frac{2}{5}$ of 35m =

(g) $\frac{7}{8}$ of £40 =

(i) $\frac{2}{9}$ of £72 =

1. In a flower shop, $\frac{7}{12}$ of the tulips are red.

   If there are 805 red tulips, how many tulips are there in total in the shop?

2. In the local town, $\frac{6}{8}$ of the houses have a green front door.

   If there are 768 green front doors, how many houses are there in the town in total?

3. In the crowd of spectators at a football match, $\frac{3}{4}$ of the people have scarves on.

   If there are 1644 people wearing scarves, how many people are there in total watching the match?

4. In a car park, $\frac{4}{7}$ of the vehicles have a sun roof.

   If there are 1548 vehicles with sun roofs, how many vehicles in total are there in the car park?

5. In a crate of marbles, $\frac{2}{3}$ of the marbles are blue.

   If there are 1578 blue marbles, how many marbles are there in the crate in total?

6. Daniel swam $\frac{9}{10}$ of the distance needed to receive his next swimming badge.

   If he swam 4950 metres, what was the total distance needed to receive the badge?

3 stars

$\frac{4}{9}$ of £5.40 $\frac{3}{4}$ of £3.40 $\frac{3}{8}$ of £6.40

$\frac{3}{7}$ of £3.50 $\frac{5}{6}$ of £3.30 $\frac{5}{9}$ of £3.60

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Reasoning 1

Sam and Joe are collecting football cards.
The album holds 360 cards.

Sam

I have filled $\frac{5}{6}$ of the album.

I have filled $\frac{2}{3}$ of the album.

Joe

Who has the most cards?
Convince me.