

Strauss Preparatory School

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Class: Year 5

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Subject: Math

Learning objective: I can solve proportion problems using fractions to find missing values.

Solving Proportion Problems

Solve these proportion problems. Show your working out.

1. There are 300 children in a school. $\frac{1}{3}$ of the children are in Key Stage One. There are 75 children in Early Years. The rest are in Key Stage Two. How many children are there in Early Years, Key Stage One and Key Stage Two?

2. An aeroplane travels at a speed of 500 miles in an hour (with a constant speed). How long (in hours and minutes) will it take to travel 1375 miles?

3. In a box of chocolates there are some white chocolate sweets and some milk chocolate sweets. In every five sweets one of them is **white**. Charlie eats 5 **white** chocolates and there are 6 **white** chocolates left in the box. How many **milk** chocolates were there before any were eaten?

4. A boat travels 40 kilometres in an hour (with a constant speed). How long (in hours and minutes) will it take to travel 130 kilometres?

Solving Proportion Problems

Solve these proportion problems. Show your working out.

5. A group of friends have raised £1000. They raised $\frac{1}{4}$ of this by doing a sponsored silence. £300 was raised by selling unwanted toys and games and the rest they collected by doing jobs for family members. How much money was raised by the sponsored silence and how much by doing jobs?

6. A box contains 8 red, 5 green, 2 orange, 3 purple, 1 blue, and 6 yellow balls. What is the proportion of green balls written as a fraction in its simplest form?

7. There are 24 fish in a pond. 6 of the fish are gold the rest are black. As a fraction, what is the proportion of the black fish? (Write your fraction in its simplest form.)

8. There are 200 animals in a zoo. $\frac{1}{4}$ of the animals are reptiles. There are 60 mammals. How many other types of animals, other than reptiles or mammals, are there?
