

## PERCENTAGE OF NUMBER PROBLEMS 3A

Find the answers to these percentage of number word problems.

Can you spot the impossible/trick problem?

- 1) A bike costs \$200 but is reduced by 30% in a sale.

How much is the bike reduced by?

What does it cost in the sale?



- 2) A bag contains some red, blue and yellow balls. 30% of the balls are blue and 40% are red.

If there are 50 balls in the bag, how many are yellow?



- 3) I toss a coin more than 60 times. It comes down tails 40% of the time. How many heads did I toss?



- 4) A piece of hematite contains 70% iron. If the hematite weighed 60g, how much iron would there be?

- 5) In a basketball game, Sally is the top scorer with 40% of the team's points. If the team scored 30 points, how many has Sally scored?



- 6) A survey of 250 trees in a small wood showed that 30% were oak trees, 20% were birch trees and the remainder were pine trees. How many pine trees were there?

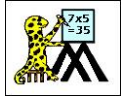
- 7) A toy helicopter costs \$60 before sales tax. If the sales tax is 10%, how much would it cost to buy?



- 8) In a school survey of 300 pupils, 70% walk to school regularly. How many children is this?

Did you manage to find the impossible problem?





## PERCENTAGE OF NUMBER PROBLEMS 3A ANSWERS

- 1) A bike costs \$200 but is reduced by 30% in a sale.

How much is the bike reduced by?

**Answer: \$60**

What does it cost in the sale?

**Answer: \$140**

- 2) A bag contains some red, blue and yellow balls. 30% of the balls are blue and 40% are red.

If there are 50 balls in the bag, how many are yellow?

**Answer: 15 yellow balls**

- 3) I toss a coin more than 60 times. It comes down tails 40% of the time. How many heads did I toss?

**Impossible question – we do not know the exact number of tosses.**

- 4) A piece of hematite contains 70% iron. If the hematite weighed 60g, how much iron would there be?

**Answer: 42g of iron**

- 5) In a basketball game, Sally is the top scorer with 40% of the team's points. If the team scored 30 points, how many has Sally scored?

**Answer: 12 points**

- 6) A survey of 250 trees in a small wood showed that 30% were oak trees, 20% were birch trees and the remainder were pine trees. How many pine trees were there?

**Answer: 125 pine trees**

- 7) A toy helicopter costs \$60 before sales tax. If the sales tax is 10%, how much would it cost to buy?



**Answer: \$66**

- 8) In a school survey of 300 pupils, 70% walk to school regularly. How many children is this?

**Answer: 210 children**