**Percentages of an amount using fractions.**

**Word Problems 1**

10% = $\frac{1}{10}$ ÷ 10  10% of 130 = 130 ÷ 10 = 13

25% = $\frac{1}{4}$ ÷ 4  25% of 80 = 80 ÷ 4 = 20

50% = $\frac{1}{2}$ ÷ 2  50% of 210 = 210 ÷ 2 = 105

75% = $\frac{3}{4}$ ÷ 4 x 3 75% of 60 = 60 ÷ 4 = 15

 15 x 3 = 45

**e.g. A shirt costing £24 has 25% off in a sale. How much would you pay for the shirt?**

 **25% = £24 ÷ 4 = £6**

 **Price you pay = £24 - 6 = £18**

1. A shirt costing £20 has 10% off in a sale. How much would you pay for the shirt?

2. A sofa costing £400 has 25% off in a sale. How much would you pay for the sofa?

3. A family meal costs £55 and your Dad leaves a 10% tip. How much does he leave?

4. Tim measure 120cm in height. His brother Phil is 25% shorter. How tall is Phil?

5. Ben and Sam have a bag containing 48 sweets. Whilst watching a film they eat 75% of the sweets. How many sweets are left?

6. Trainers are usually £30 but this week they have been reduced by 10%. What is the price of the trainers this week?

7. Mr Smith wants to buy a new car. He finds a car he likes for £5500 and then manages to negotiate 10% off the price. How much does Mr Smith pay for his new car?

8. In 2012 Lucy did a week long survey to record the number of birds in her garden. Over the week she recorded 120 birds. In 2013 she carried out another survey, but this time she counted 25% **more** birds.

 How many birds did Lucy count in 2013?

9. There are 300 pupils in a school and 75% of the pupils are boys. **How many** girls are there in the school?

10. Bob’s bedroom has an area of 24m². The area of his sister’s room is 75% bigger. What is the area of his sister’s room?