

2. The box of biscuits comes with 25% extra biscuits. If a normal box has 20 biscuits in it.
- (a) How many biscuits extra does the 25% box have in it? 5
- (b) How many biscuits altogether does the 25% box have in it? 25
3. A shop is offering a 10% discount. Everything on sale is now 10% cheaper. Susan sees a nice jumper she likes for £20.
- (a) How much does she save with the 10% discount? $£2$
- (b) What is the new price of her jumper? $£18$
4. Mr Smith's factory makes screws. His machines are old so 25% of the screws they make aren't good enough and they have to be thrown away. On a normal day Mr Smith makes 600 screws.
- (a) How many of these screws will he have to throw away? 150
- (b) How many days would it take him to produce 1800 screws? 3 days

Section F – More Complicated Percentages (MM only)

You can calculate more complicated percentages by using your knowledge of simple percentages. For example you can find 75% of something by adding 50% of that thing and 25% of that thing together, i.e. $75\% = 50\% + 25\%$

Use similar strategies to find out...

- | | | | |
|---------------|------|----------------|-------|
| 1. 75% of 80 | 60 | 4. 35% of 120 | 42 |
| 2. 20% of 300 | 60 | 5. 45% of 80 | 36 |
| 3. 15% of 60 | 9 | 6. 95% of 180? | 171 |

Section G – More Difficult Word Problems (MM only)

1. Mark buys a bag of crisps that has 50% extra free in it. The special offer packet has 30g in it. What weight of crisps would be in a standard packet? 20g
2. Jane buys a dress in her local fashion shop. She has a discount card so she gets £25 off anything she buys. She spent £15 on the dress. How much would she have had to pay without her discount card? $£40$

Challenge (MM only)

In this country you pay V.A.T. (Value Added Tax) on a lot of items you buy. V.A.T. is 17.5%. What is an easy way to calculate 17.5% of something?

$$\begin{array}{l}
 \text{Find } 10\% = \\
 \text{Find } 5\% \left(\frac{1}{2} \text{ of } 10\%\right) = \\
 \text{Find } 2\frac{1}{2}\% \left(\frac{1}{2} \text{ of } 5\%\right) = \\
 \hline
 \text{Total } \left(17\frac{1}{2}\%\right)
 \end{array}$$