

# Percentages

## Exercise 1 – Non Calculator

### 1) Work out:

- |                               |                                 |                             |
|-------------------------------|---------------------------------|-----------------------------|
| a) 50% of £84                 | b) 25% of £1000                 | c) 20% of £80               |
| d) 10% of £40                 | e) 20% of £6400                 | f) $33\frac{1}{3}\%$ of £81 |
| g) 50% of £9                  | h) 10% of £52                   | i) 10% of £63               |
| j) 75% of £48                 | k) 75% of £92                   | l) $66\frac{2}{3}\%$ of £45 |
| m) $33\frac{1}{3}\%$ of £7.20 | n) $66\frac{2}{3}\%$ of £153.60 | o) 75% of £61               |
| p) 10% of £15.50              | q) 20% of £13.20                | r) 10% of 20p               |

- 2) A turtle laid 132 eggs. 50% of them were eaten by birds.  
How many were eaten by birds?
- 3) 20% of the pupils in a school are left handed.  
If there are 1100 pupils, how many of them are left handed?
- 4) 25% of the items sold at a car boot sale were CDs.  
How many CDs were sold if there were 5400 items?
- 5) In Glasgow in 2009, it was sunny for 20% of the time.  
If there are 365 days in a year, how many days was it sunny for?

## Exercise 2 - Calculator

### 1) Calculate:

- a) 7% of £16      b) 9% of £65      c) 41% of £25      d) 89% of £530
- e) 17% of £380      f) 22% of £60      g) 46% of £5      h) 22% of £680
- i) 7% of £50      j) 19% of £60      k) 35% of £14      l) 11% of £90
- m) 44% of £12.50      n) 5% of £17      o) 6% of £90      p) 84% of £68.50
- q) 8.5% of £64      r) 7.2% of £620      s) 3.1% of £540      t) 10.7% of £889
- u)  $4\frac{1}{2}\%$  of £18      v)  $12\frac{1}{2}\%$  of £84      w)  $3\frac{1}{2}\%$  of £650      x)  $2\frac{1}{2}\%$  of £12

## Exercise 3 – Problem Solving

- 1) Heidi is offered 11% of £350 or 45% of £80.  
Which offer should Heidi take?
- 2) Goats' cheese contains 15% fat.  
How much fat is there in a pack which contains:
- a) 240g      b) 460g      c) 0.86kg      d) 0.38kg
- 3) Of the 3 cakes below, which one, *per helping*, is better for you in terms of fat content? (assume the cupcake is 1 helping)



500g Chocolate Cake  
18% Fat

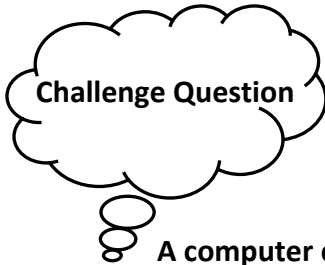


250g Carrot Cake  
8% Fat

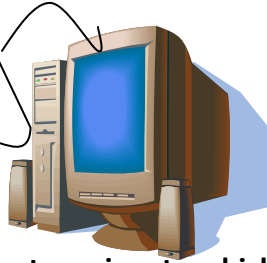


50g Cupcake  
12% Fat

4)



£860



A computer catalogue quotes prices to which a tax of 20% (VAT) must be added. What would be the price of the computer above?

3) **VAT** is short for 'value added tax'. It is a tax on goods and is money paid to the government. The current rate of V.A.T. is 20%.

Work out the **VAT** on each of the items shown below.

a)



Camera £142

b)



Fridge £285

c)



Video HiFi £680

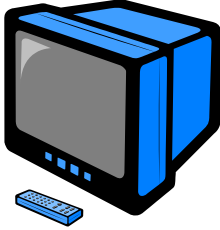
d)



Carpets £1250

e)

## Colour T.V.



Cost = £689

f)

## Computer



Cost = £2650

g)

## Car repair Bill

4 new tyres at £44.75 each	£
Oil	£3.89
Car check	£19.95
New Exhaust	£63.75

Work out the total  
then add VAT to get the Bill.

Total = £

VAT = £

Bill = £

h)

## Windows



Work out the VAT to be paid  
on installing 8 new windows  
at £38.55 each.