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1a. Given 2315 + 478

$$\begin{array}{r} 2\,3\,1\,5 \\ +\ 4\,7\,8 \\ \hline 2\,7\,9\,3 \\ \hline 1 \end{array}$$

b. Given £4.17 x 5

$$\begin{array}{r} 4.17 \\ \times\ 5 \\ \hline £20.85 \\ \hline 3 \end{array}$$

c. 50% of 164

Step 1 : Convert 50% to a fraction $\frac{50}{100} = \frac{1}{2}$

Step 2 : $\frac{1}{2}$ of 164 m

$$2\overline{)1.^{1}64} \quad \begin{array}{l} 82 \\ \\ \end{array}$$

= 82 metres

2. Given the meal prices, adding them up it comes to: 25% of £9.60

$$\begin{array}{r} 4.50 \\ 4.75 \\ 0.70 \\ +\ 0.85 \\ \hline £10.80 \end{array}$$

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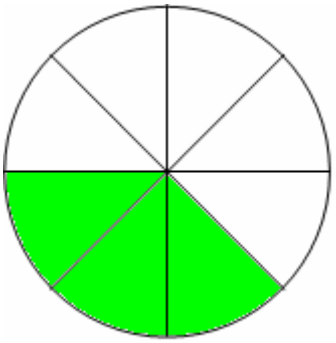
2.b Given Walter's bill, we can work out the value of salmon salad by:

$$\begin{array}{r} £1.75 \\ +\ £0.90 \\ \hline £2.65 \\ \hline 1 \end{array} \qquad \begin{array}{r} £\ 6.95 \\ -\ £\ 2.65 \\ \hline £\ 4.30 \end{array}$$

3.a Since the pie chart has 3 pieces filled in and there are 8 pieces in total. The fraction of the class that are absent is:

Absent: Green Fraction is $\frac{3}{8}$

Present: White



b. If there are 32 in the class, then the whole circle represents 32. so the number absent is:

$\frac{3}{8}$ of 32

$8\overline{)32} = 4$ $\qquad 4 \times 3 = 12$ pupils

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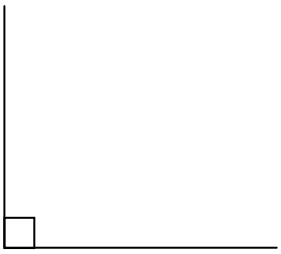
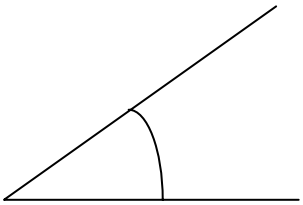
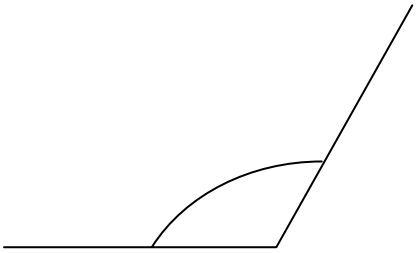
4. The acute angle is diagram (ii) since this is less than 90°.



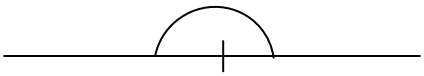
(i)



(ii)

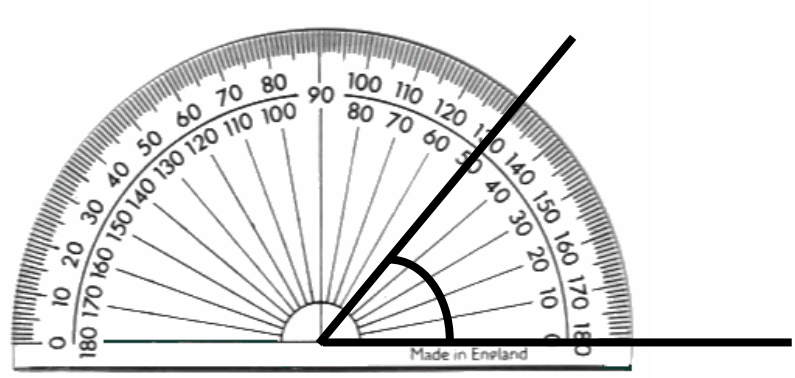


(iii)



(iv)

(b) Measuring the angle we get 50°:



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5.a Given that the maximum weight cannot be greater than 105kg to be safe. If we add Brian and his brother weights together and it is less than 105kg then it will be safe otherwise it won't be.

$$\begin{array}{r} 48 \text{ kg} \\ +\ 54 \text{ kg} \\ \hline 102 \text{ kg} \\ \hline 1 \end{array}$$

They can play safely.

6a. Since the circus is open from between 12th October to 17th October, the total number of days will be:

(Last day – first day) +1 = 17 – 12 +1 = 6

b. If extended by 10 days then new date of departure is 6th November 2006:

Date	Extra days
27 October 2006	
28 October 2006	1
29 October 2006	2
30 October 2006	3
31 October 2006	4
01 November 2006	5
02 November 2006	6
03 November 2006	7
04 November 2006	8
05 November 2006	9
06 November 2006	10

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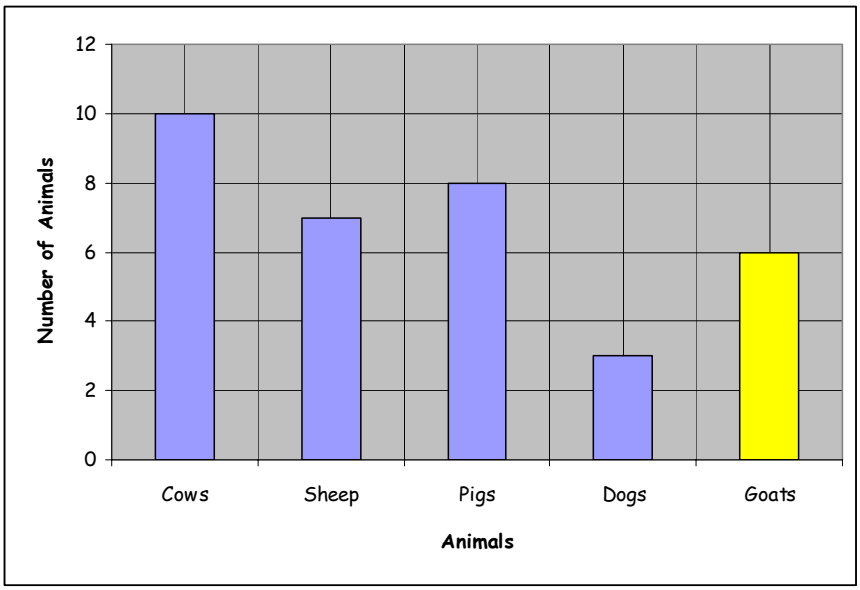
7a. From the graph the total n umber of sheep is 7.



b. See graph.

If the total number of animals is 34, then the number of goats must be:

Number of goats = 34 – (10+7+8+3) = 34 – 28 = 7 goats.