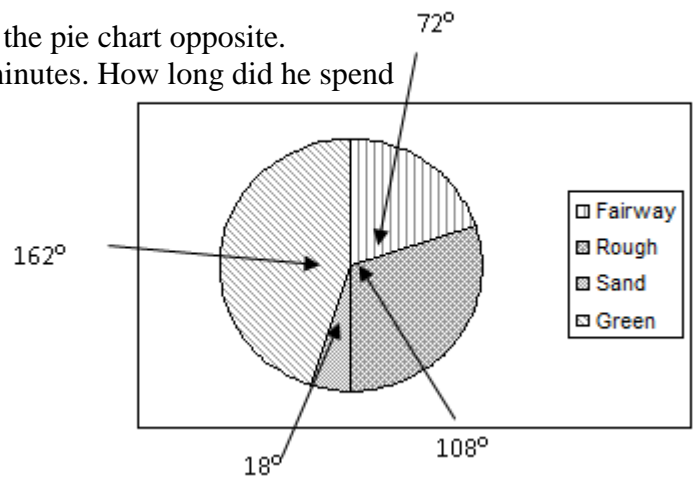


# National 4 Mathematics: Homework 7

## § 1 Pie Charts

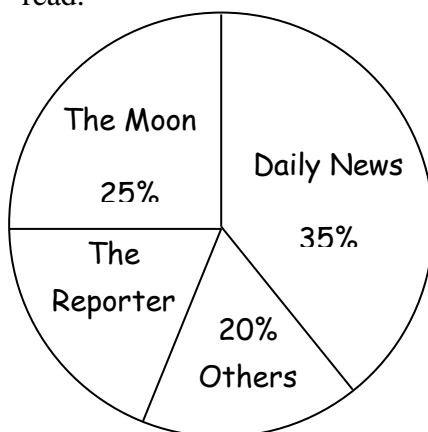
- 1** George analysed his golf game and drew the pie chart opposite. His time for a complete round was 240 minutes. How long did he spend
- in the sand
  - on the fairway
  - on the green?



- 2** Draw a pie chart to represent the information in the table below

Day	Monday	Tuesday	Wednesday	Thursday	Friday
Pupils absent	6	4	3	5	8

- 3** The pie-chart shows the results when 120 people were asked which daily newspaper they read.

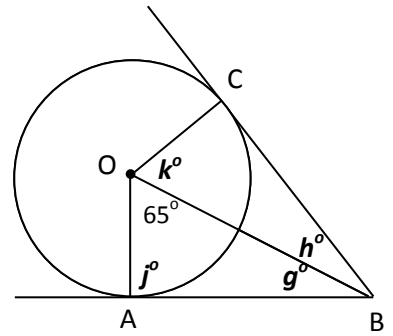
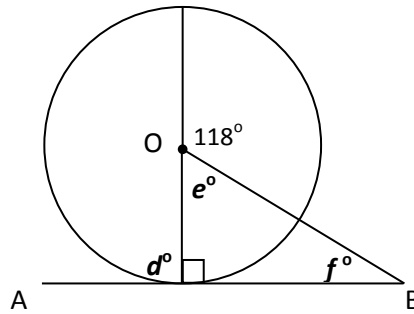
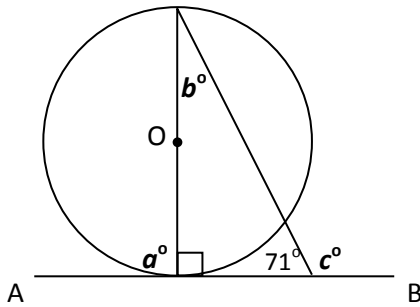


- Which paper is the most popular?
- What percentage read The Reporter?
- How many people read the Daily News ?

# National 4 Mathematics: Homework 7

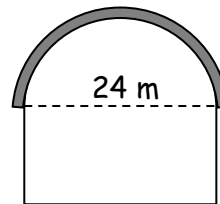
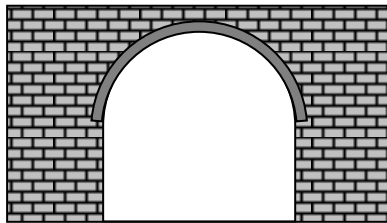
## § 2 Angles in a Circle

- 1 In the diagrams below the lines AB (and BC) are tangents to the circles centre O. Calculate the sizes of the marked angles.



## § 3 Mixed

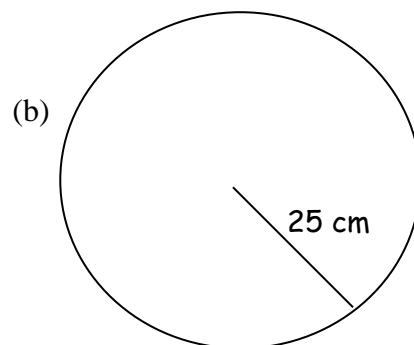
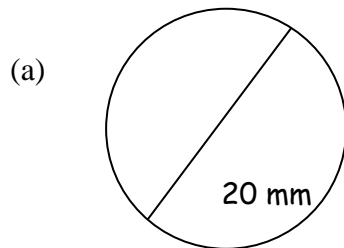
- 1 The arch of a bridge is semicircular. It is to be supported by a strip of metal round the edge of the semicircle.



The diameter of the semi-circle is 24 metres.

Calculate the length of the metal strip.

- 2 Calculate the circumference of the following circles



- 3 Factorise:

a)  $12x + 18$

b)  $4g + 4$

c)  $21r + 7$

d)  $3q - 6$

e)  $32h - 28$

f)  $5x - 15$

g)  $6c + 9c$

h)  $18t - 36$