3 5 8 10 10 Examiner's Use

For the numbers above, find

(i) the mean.

$$\frac{3+5+8+10+10}{5} = \frac{36}{5} = 7.2$$

Answer(a)(i) [2]

(ii) the mode,

(iii) the median,

Answer(a)(iii) 
$$\delta$$
 [1]

the range. 10 - 3 = 7

(v) A sixth number, 11, is added to the list.

Write down which one of the mean, the mode, the median and the range will stay the same.

$$Answer(a)(v)$$
 Mode [1]

(b) The table shows the results of asking 24 children their favourite colour.

| Colour             | Red | Blue | Yellow | Green | Pink |
|--------------------|-----|------|--------|-------|------|
| Number of children | 4   | 8    | 2      | 3     | 7    |

Write down the probability, as a fraction, that the favourite colour of a child chosen at random is

(i) blue, 
$$\frac{8}{4+8+2+3+7} = \frac{8}{24}$$
 Answer(b)(i)  $\frac{8}{24}$  [1]

Answer(b)(i) 
$$\frac{\frac{0}{24}}{24}$$
 [1]

(ii) not pink. 
$$\frac{4+8+2+3}{4+8+2+3+7} = \frac{17}{24}$$

(ii) not pink. 
$$\frac{4+8+2+3}{4+8+2+3+7} = \frac{17}{24}$$
 Answer(b)(ii)  $\frac{17}{24}$  [1]

(c) The information in part (b) is to be shown in a pie chart.

Work out the sector angle for green. Do not draw the pie chart.

$$\frac{3}{24} \times 360^{\circ} = 45^{\circ}$$