Exercise 9.2

1. Draw a mark or arrow pointing to the given values on each scale:

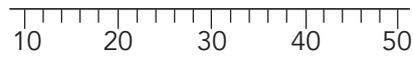**(a)** **(i)** 55   **(ii)** 34   **(iii)** 69

(b) **(i)** 20   **(ii)** 36   **(iii)** 48

20 30 40 50 60 70

10   20   30   40   50

(c) **(i)** 62   **(ii)** 85   **(iii)** 97

(d) **(i)** 70   **(ii)** 100   **(iii)** 220

50 60 70 80 90 100

50   100   150   200   250
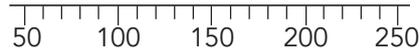
(e) **(i)** 25   **(ii)** 110   **(iii)** 230

(f) **(i)** 8   **(ii)** 12   **(iii)** 19

0   50   100   150   200   250

0   5   10   15   20
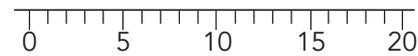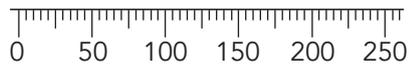
(g) **(i)** 140   **(ii)** 350   **(iii)** 530

(h) **(i)** 180   **(ii)** 320   **(iii)** 460

100   200   300   400   500   600

100   200   300   400   500
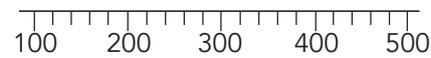
2. Draw a line from the centre dot pointing to the given values on each scale:

(a) **(i)** 4   **(ii)** 7·5   **(iii)** 11·2

(b) **(i)** 3·8   **(ii)** 9·5   **(iii)** 13·3

(c) **(i)** 12·5   **(ii)** 0·7   **(iii)** 6·2
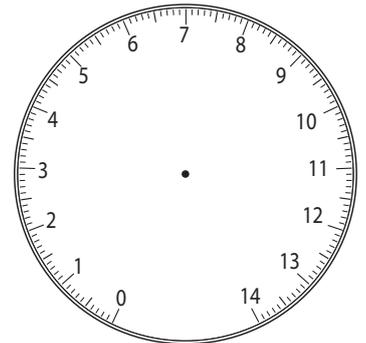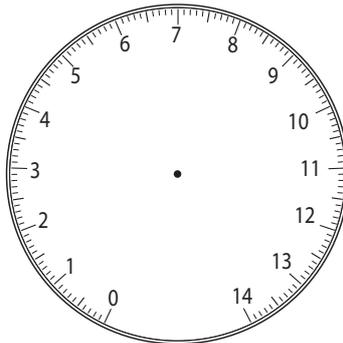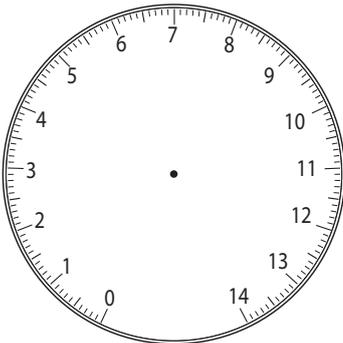
(a) **(i)** 120   **(ii)** 170   **(iii)** 210

(b) **(i)** 44   **(ii)** 128   **(iii)** 206

(c) **(i)** 4   **(ii)** 58   **(iii)** 234
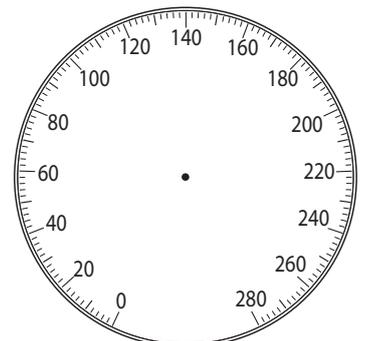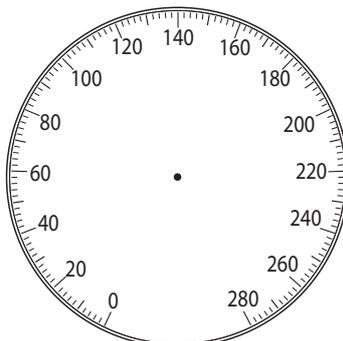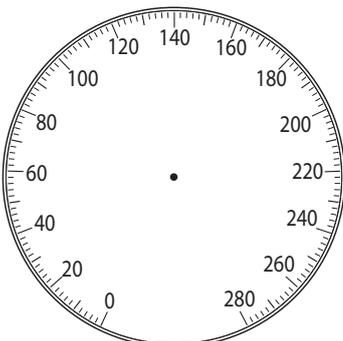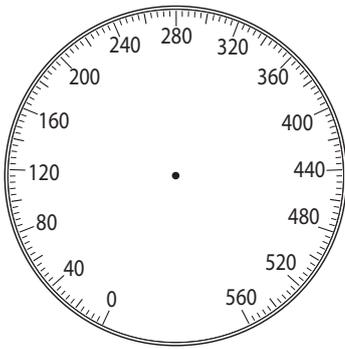
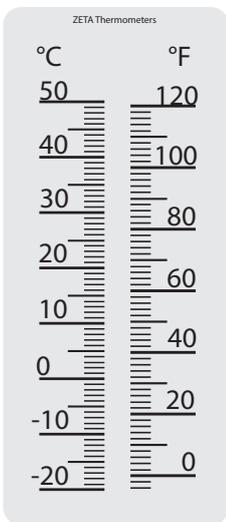**(a) (i)** 140   **(ii)** 480   **(iii)** 500   **(b) (i)** 20   **(ii)** 300   **(iii)** 12   **(c) (i)** 4   **(ii)** 292   **(iii)** 436
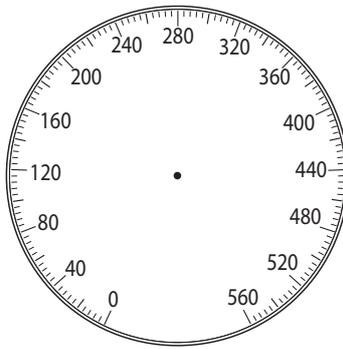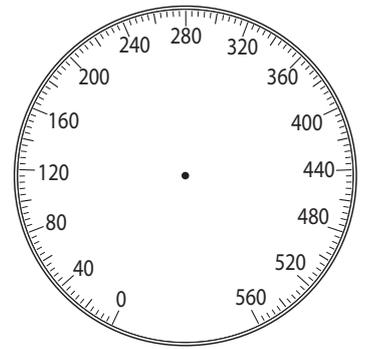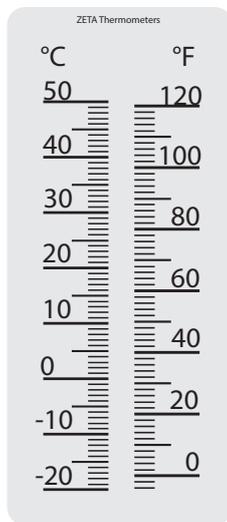
3. Mark the value of the scale in °C or °F to the nearest degree:
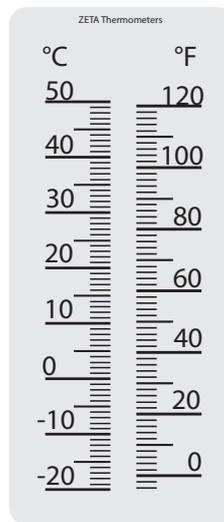
(a) (i) 15°C   **(ii)** 90°F   **(b) (i)** –5°C   **(i)** 110°F   **(c) (i)** 43°C   **(i)** 90°F   **(d) (i)** 26°C   **(i)** 52°F
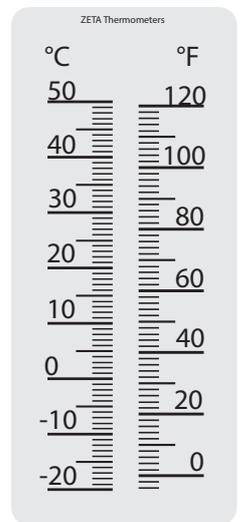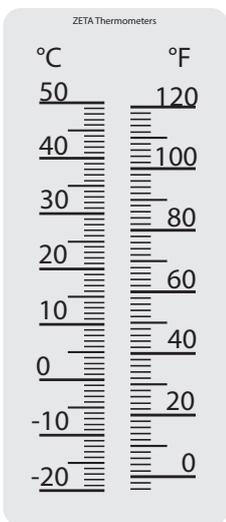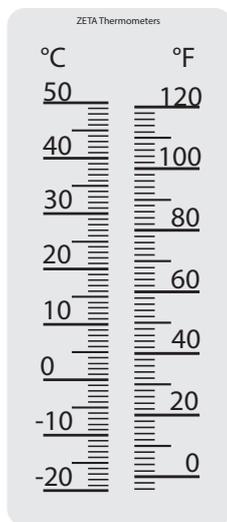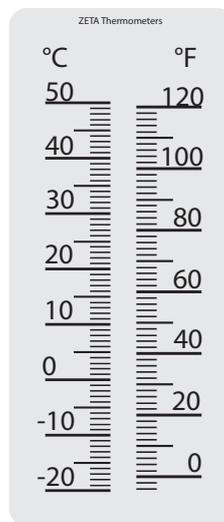
(e) (i) 30°C   **(ii)** 88°F   **(f) (i)** 47°C   **(i)** 116°F   **(g) (i)** –4°C   **(i)** 12°F   **(h) (i)** –17°C   **(i)** 44°F
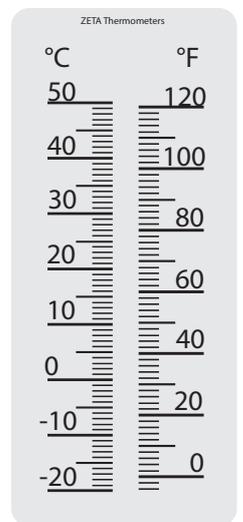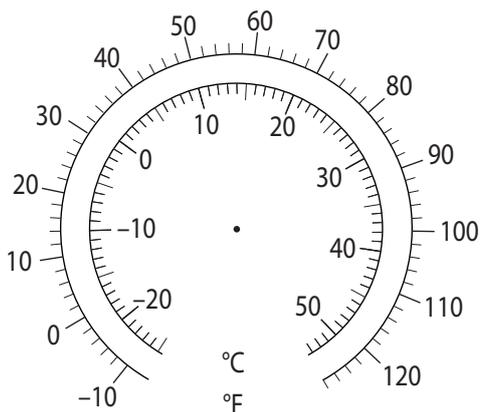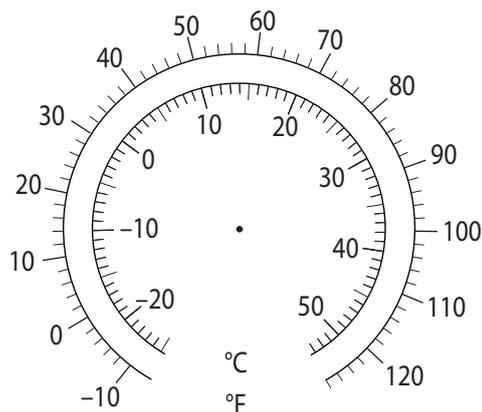
4. Read/calculate the value of the scale for each coloured line in **(i)** °C and **(ii)** °F to the nearest degree:

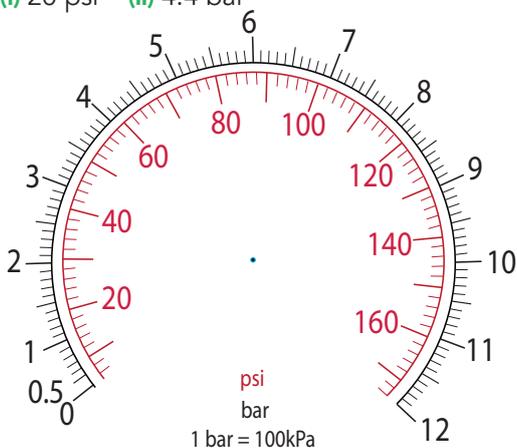**(a) (i)** 15°C   **(ii)** 90°F

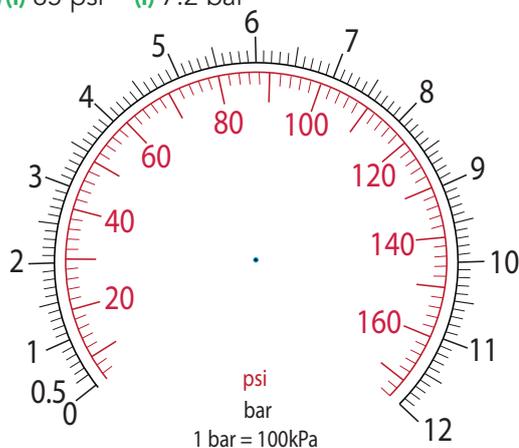**(b) (i)** −5°C   **(i)** 110°F

3. Read/calculate the value of the scale for each coloured line in **(i)** psi and **(ii)** bar (to 1 decimal place):
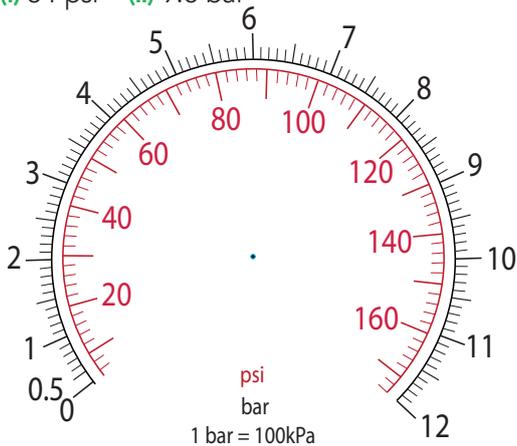
(a) (i) 20 psi   **(ii)** 4.4 bar

(b) (i) 85 psi   **(i)** 7.2 bar

(a) (i) 34 psi   **(ii)** 9.8 bar

(b) (i) 146 psi   **(i)** 11.3 bar