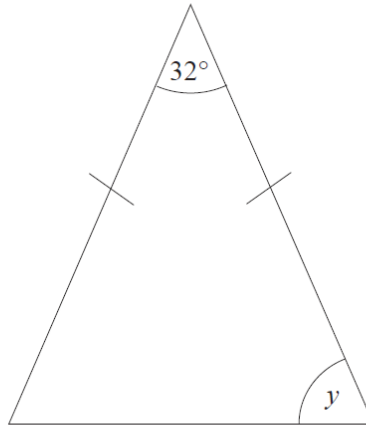


m3 =
36
days
to go!

(b) Work out the size of the angle y in the diagram below.



Answer _____ $^\circ$ [2]

14 The waiting times for patients at a surgery are recorded in the table.

| Waiting time t (minutes) | Number of patients |
|----------------------------|--------------------|
| $0 < t \leq 5$ | 7 |
| $5 < t \leq 10$ | 8 |
| $10 < t \leq 15$ | 5 |
| $15 < t \leq 20$ | 5 |
| $20 < t \leq 25$ | 4 |
| $25 < t \leq 30$ | 1 |

(a) Write down the modal class.

Answer _____ [1]

(b) Calculate an estimate of the mean waiting time.

Answer _____ minutes [4]

17

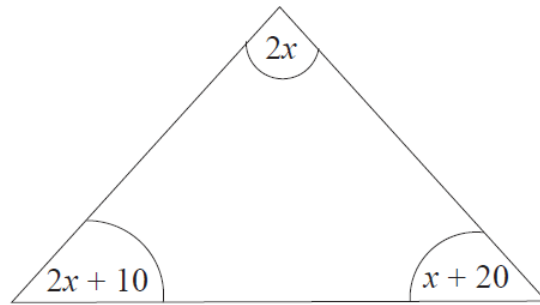


diagram
not drawn
accurately

Form and solve an equation to work out the size of the smallest angle in the triangle above.

Equation _____ [1]

Answer smallest angle = _____° [3]

- 21 A submarine makes a diving angle of 20° below the horizontal as shown. It travels at a constant speed of 12 m/s.

Work out how deep the front end of the submarine is after one minute.

