

Marking Activity

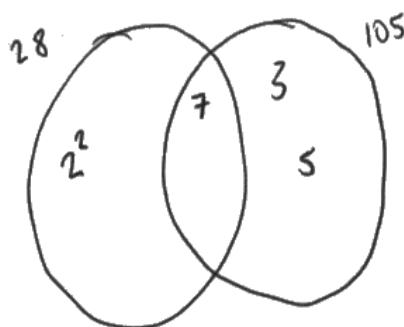
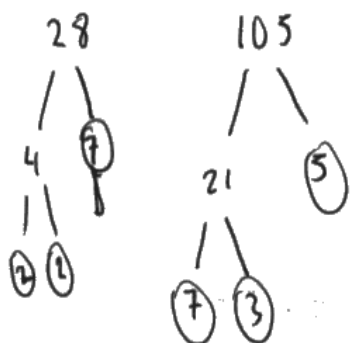
Q2 Answer is 420

Q9 Answer is 53.5°

Q4 Answer is 3.6

A

2 Find the lowest common multiple (LCM) of 28 and 105



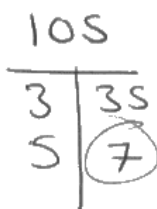
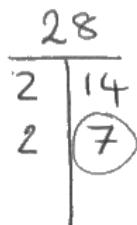
$$2^2 \times 3 \times 5 = 60$$

$$2^2 \times 3 \times 5$$

B

2 Find the lowest common multiple (LCM) of 28 and 105

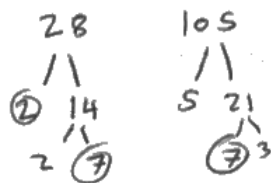
28 105



7

C

- 2 Find the lowest common multiple (LCM) of 28 and 105



7

D

- 9 Here is a right-angled triangle.

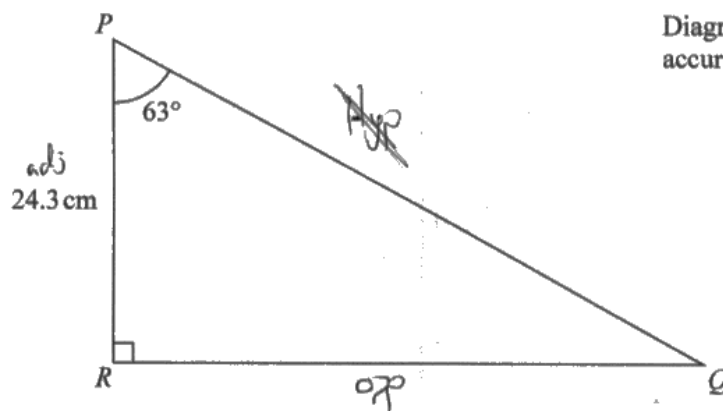
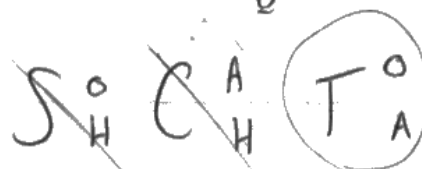


Diagram NOT accurately drawn

Calculate the length of PQ.
Give your answer correct to 3 significant figures.



- No^t needed



$$\tan(63) \times 24.3 = 47.69$$

$$= 47.7$$

E

9 Here is a right-angled triangle.

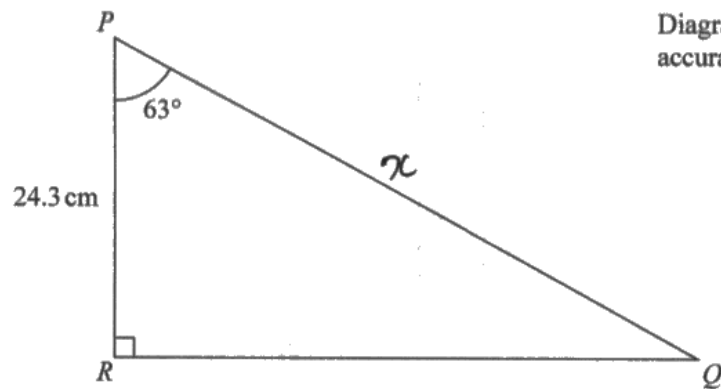


Diagram **NOT**
accurately drawn

Calculate the length of PQ .

Give your answer correct to 3 significant figures.

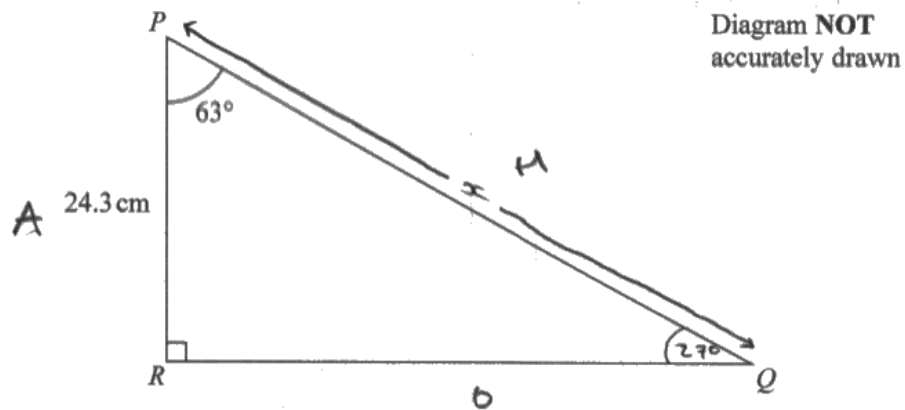
SOHCAHTOA

CAH

$$\frac{24.3}{\cos(63)} = 52.9 \text{ cm}$$

F

9 Here is a right-angled triangle.



Calculate the length of PQ .

Give your answer correct to 3 significant figures.

Sine rule

$$\begin{array}{r} 180 \\ - 90 \\ - 63 \\ \hline 27^\circ \end{array}$$

$$\frac{a}{A} = \frac{b}{B}$$

$$\frac{24.3}{\sin(27^\circ)} = \frac{x}{\sin(90^\circ)}$$

$$x = \frac{24.3}{\sin(27^\circ) \times \sin(90^\circ)}$$

$$x = 53.512534913$$

$$x = \underline{\underline{53.5 \text{ cm}}}$$

G

Weight (w kg)	Frequency
$2 < w \leq 3$	12
$3 < w \leq 4$	16
$4 < w \leq 5$	9
$5 < w \leq 6$	2
$6 < w \leq 7$	1

(a) Write down the modal class.

$$3 < w \leq 4$$

(1)

(b) Work out an estimate for the mean weight of the 40 babies.

$$\frac{3 \times 12 + 4 \times 16 + 5 \times 9 + 6 \times 2 + 7 \times 1}{40} = 4.1$$

$$4.1 \text{ kg}$$

(4)

H

Weight (w kg)	Frequency
$2 < w \leq 3$	12
$3 < w \leq 4$	16
$4 < w \leq 5$	9
$5 < w \leq 6$	2
$6 < w \leq 7$	1

(a) Write down the modal class.

$$\underline{3 < w \leq 4}$$

(1)

(b) Work out an estimate for the mean weight of the 40 babies.

$$\left. \begin{array}{l} 1.5 \times 12 = 18 \\ 3.5 \times 16 = 56 \\ 4.5 \times 9 = 40.5 \\ 5.5 \times 2 = 11 \\ 6.5 \times 1 = 6.5 \end{array} \right\} 132$$

$$132 \div 40 = 3.3$$

$$\underline{3.3} \text{ kg}$$

(4)

I

Weight (w kg)	Frequency
$2 < w \leq 3$	12
$3 < w \leq 4$	16
$4 < w \leq 5$	9
$5 < w \leq 6$	2
$6 < w \leq 7$	1

2.5

3.5

4.5

5.5

6.5

(a) Write down the modal class.

 $3 < w \leq 4$

(1)

(b) Work out an estimate for the mean weight of the 40 babies.

$$\begin{aligned}
 2.5 \times 12 &= 30 + \\
 3.5 \times 16 &= 56 + \\
 4.5 \times 9 &= 40.5 + \\
 5.5 \times 2 &= 11 + \\
 6.5 \times 1 &= 6.5 + \\
 &= 143.5
 \end{aligned}$$

$$143.5 \div 40$$

3.5875

kg

(4)