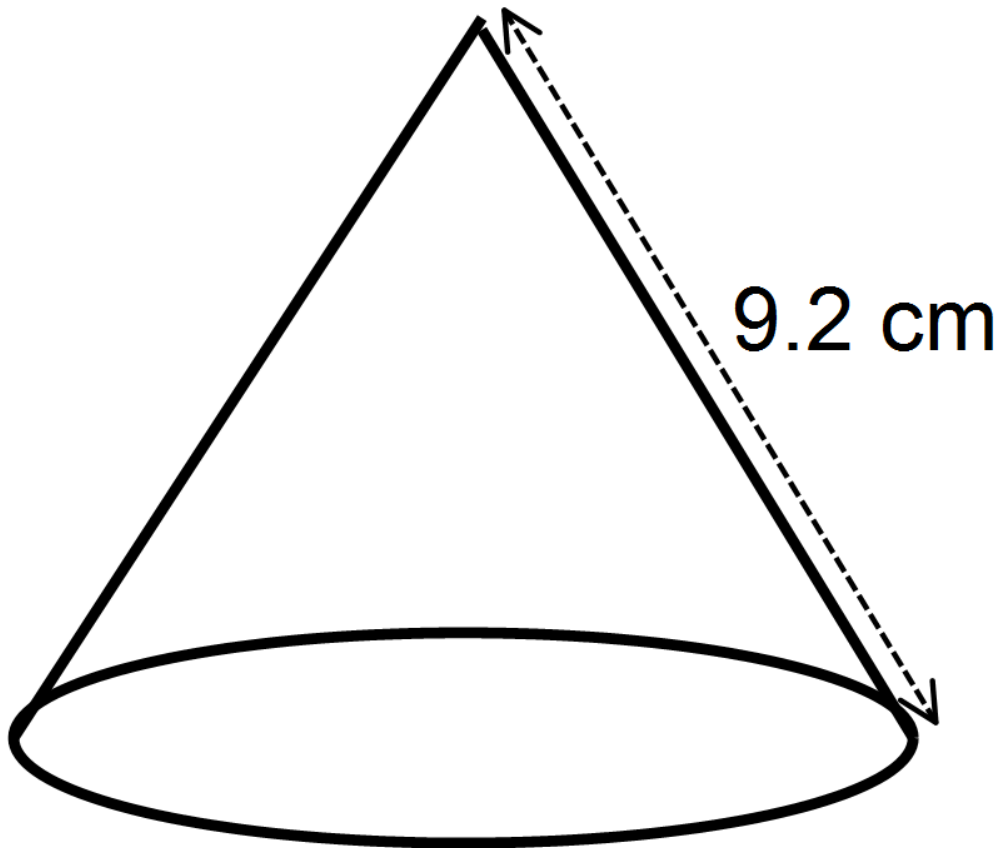


300

Calculate the volume of the cone



diameter = 12 cm

Answer correct to the nearest cm^3

GCSE HIGHER MIXTURE

$$2\frac{1}{12}$$

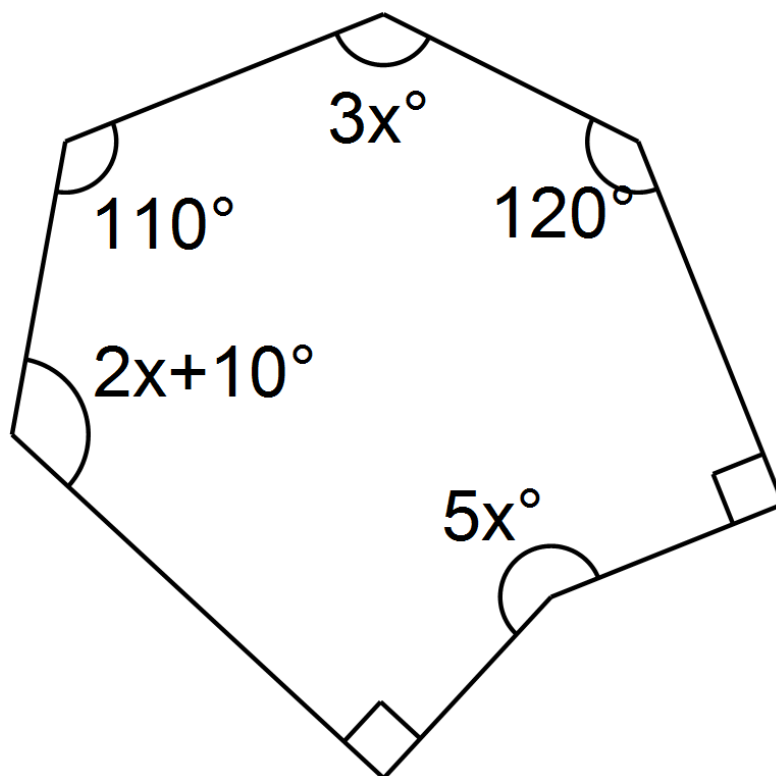
Work out the TOTAL frequency

Length	Frequency	Frequency Density
$0 < L \leq 10$	x	0.6
$10 < L \leq 25$	30	2
$25 < L \leq 50$	y	2.2
$50 < L \leq 70$	z	1.5

GCSE HIGHER MIXTURE

5.09

Calculate x



GCSE HIGHER MIXTURE

14.1

Find the 100th term of the sequence

$-7, -3, 1, 5, \dots$

GCSE HIGHER MIXTURE

389

Work out

$$1\frac{2}{3} \times 1\frac{1}{4}$$

GCSE HIGHER MIXTURE

121

Solve simultaneously to find the value of x

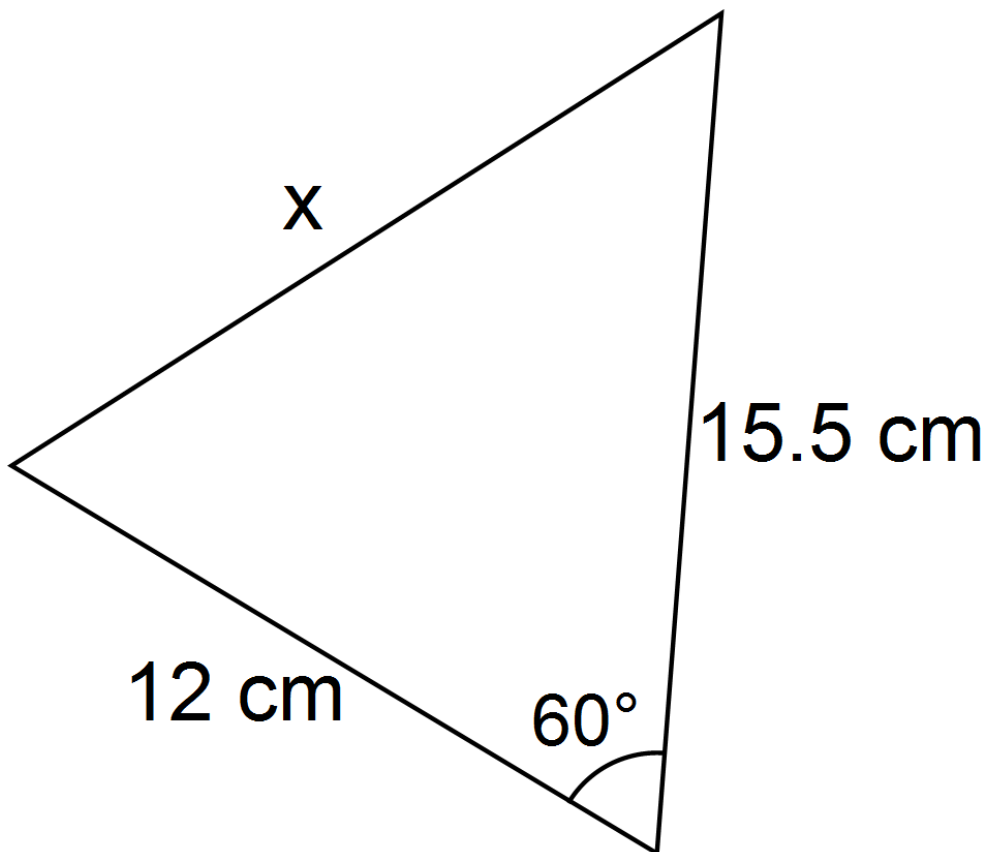
$$3x - 2y = 40$$

$$2x + 5y = 14$$

GCSE HIGHER MIXTURE

263

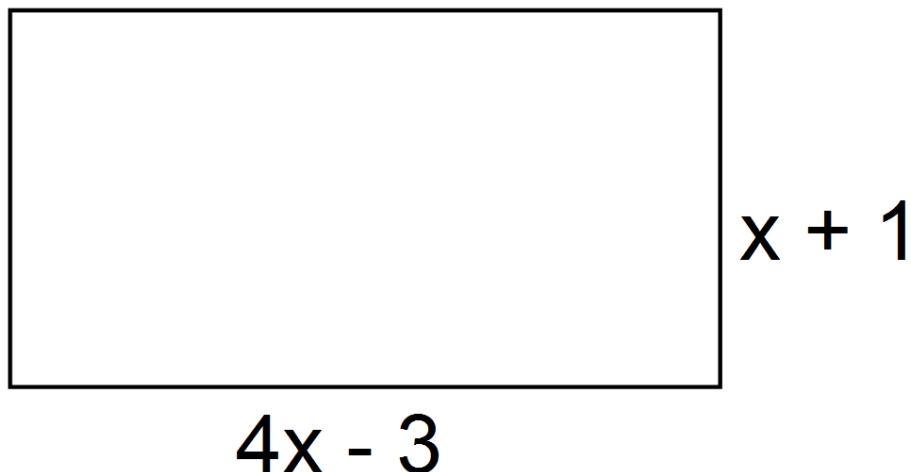
Calculate the length x correct to 3 significant figures



GCSE HIGHER MIXTURE

2.46

The rectangle has an area of 36 cm^2 .
Calculate the perimeter.



GCSE HIGHER MIXTURE

$$2\frac{7}{12}$$

Jake bought a bike and sold it the following year for £722.50 making a 15% loss. How much did Jake pay for the bike?

GCSE HIGHER MIXTURE

26

P is inversely proportional to the cube root of q.

$$Q = 27, P = 12.$$

Find the value of P when

$$Q = 0.125$$

0.121

A metal cube of side length 5 cm is melted and recast as two identical spheres. Calculate the radius of the spheres. Give your answer correct to 2 decimal places.

GCSE HIGHER MIXTURE

850

A triangle with vertices at $(1,3)$ $(1,7)$ and $(3,3)$ is enlarged by scale factor 4.

Calculate the area of the enlarged shape.

GCSE HIGHER MIXTURE

30

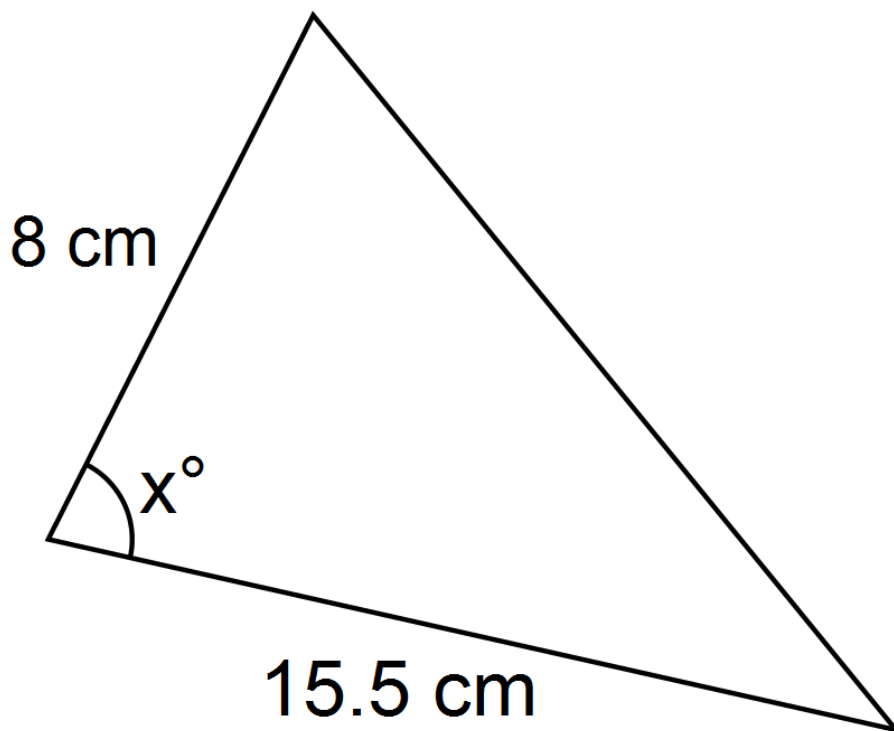
A car travels at an average speed of 48 mph for 40 minutes. Calculate the distance travelled.

GCSE HIGHER MIXTURE

M

4

The area of the triangle is 60 cm^2 .
Calculate the size of angle x .



Answer to the nearest degree

GCSE HIGHER MIXTURE

N

12

Calculate the gradient of the line that is perpendicular to the line joining points $(5, -3)$ and $(-3, -1)$

GCSE HIGHER MIXTURE

0

64

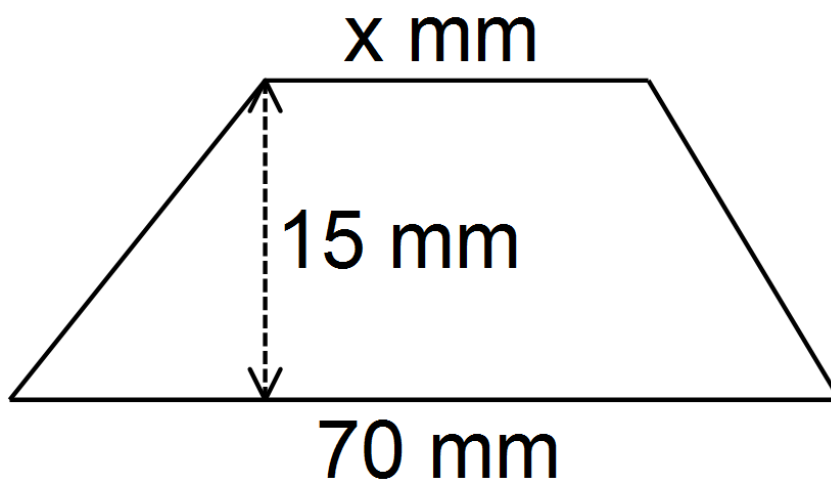
Find the 20th term of the quadratic sequence

-4, -6, -6, -4, 0, 6,...

GCSE HIGHER MIXTURE

72

The trapezium has an area of 7.5 cm^2 . Calculate x



GCSE HIGHER MIXTURE

48

Work out

$$5\frac{1}{3} - 2\frac{3}{4}$$

GCSE HIGHER MIXTURE

R

75

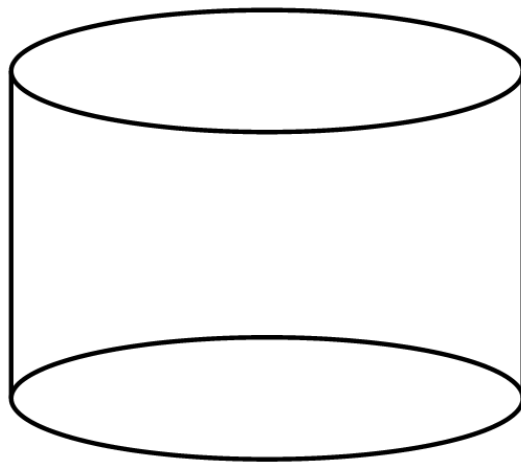
Solve using the quadratic formulae to find the largest root correct to 3 significant figures

$$2x^2 + 8x = 1$$

GCSE HIGHER MIXTURE

32

The cylinder is made from a metal with density 4.5 g/cm^3 . Calculate the mass of the cylinder (correct to 1 decimal place)



10 mm

radius = 6 mm

Answer correct to 2 decimal places

GCSE HIGHER MIXTURE

GCSE HIGHER MIXTURE

TREASURE HUNT

