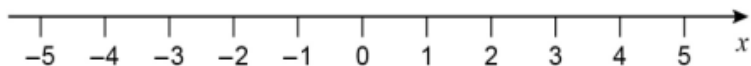


AQA GCSE Mathematics Non-Calculator 2024 Higher Paper 1 Revision Worksheet

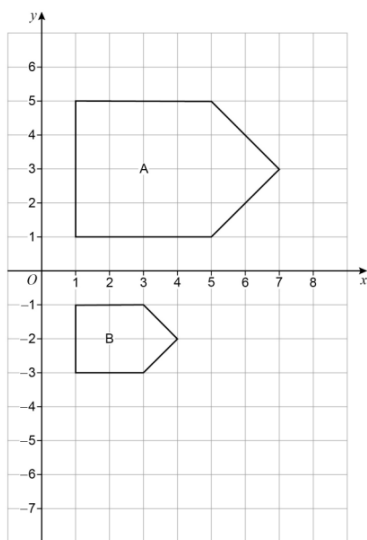
Question 10

(a) Represent $-2 < x < 4$ on the number line.



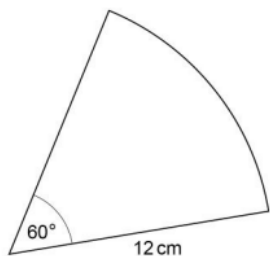
(b) Solve $5y + 14 \geq 11$

Question 11



Describe fully the single transformation that maps shape A to shape B.

Question 12



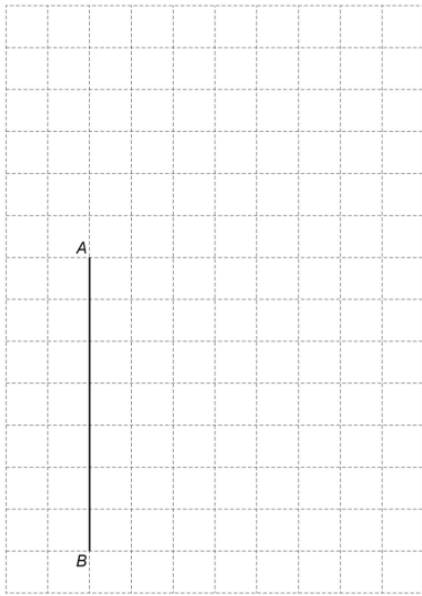
Work out the length of the arc. Give your answer in terms of π .

Question 13

ABCDE is a pentagon with: $AB = 7$ cm

- $BC = 6$ cm
- AB and BC are perpendicular.
- AB and DC are equal and parallel.
- Area of the pentagon = 54 cm^2
- The pentagon has exactly **one** line of symmetry.

Complete a **labelled** drawing of the pentagon.



Question 14

4 chocolate bars and 3 packets of mints cost £4.70

5 chocolate bars and 1 packet of mints cost £4.50

Work out the cost of a chocolate bar and the cost of a packet of mints.

Question 15

(a) Between which two consecutive integers does the square root of 210 lie?

(b) Here are two calculations, A and B.

A
$1.92^7 + 6.9^3$

B
$5 \times \sqrt[3]{1000\ 350}$

Use approximations to show that answer to A < answer to B.

The table shows information about the ages of members of two clubs.

	Median age (years)	Interquartile range of ages (years)
Swimming club	21.2	7.3
Cycling club	29.7	4.6

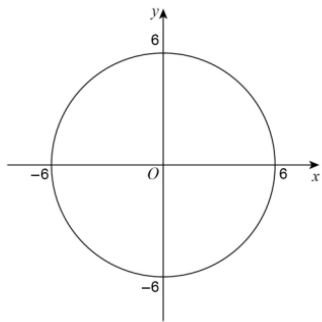
Compare the average age and consistency of ages for the members of the two clubs.

Question 17

Rearrange $y = \frac{3x+7}{x}$ to make x the subject.

Question 18

A circle has centre O and passes through $(0,6)$.



Write down the equation of the circle.

Question 19

A, B and C are numbers. Here is some information about B and C:

- $B = \frac{7}{4}$ of A
- C = A **increased** by 150%

Work out C as a fraction of B.

Question 20

$$5x^3 + ax^2 + bx + c \equiv kx^3 + (2 - k)x^2 + (a^2 - 1)x + \frac{b}{2}$$

Work out the values of a , b and c .

Question 21

Prove algebraically that: $\frac{1}{18} = \frac{56}{55} - \frac{1}{55}$