

Mathematics Equivalence Test

Sample Papers

There are two papers, Non-calculator and Calculator, each worth 50 marks. These papers reflect the current National Curriculum and GCSE for England. You are assessed across the two papers.

Paper 2

You **MAY** use a calculator.

Time: 1 hour

Answer all questions in the answer spaces.

Show your working where relevant.

4 Use this list to complete the statements.

$\frac{4}{3}$ 4 30% $\frac{1}{4}$ 0.4 3 $\frac{3}{4}$ 4% $\frac{1}{3}$ 40

The reciprocal of 4 is

A score of 18 out of 60 as a proportion is

To work out 25% the multiplier is

The scale factor from 90 g to 30 g is

[4]

5 Write the name of each shape.

I am a quadrilateral.
I have no line (reflection) symmetry.



[2]

6 A television is for sale at £790 plus VAT at 20%.
In a sale the total price is then reduced by 25%.

Work out the sale price.

£ [3]

7 (a) Complete this sentence.

The gradient of $y = 3x + 11$ is and the y -intercept is [2]

(b) Rearrange $y = 3x + 11$ to make x the subject.

$x =$ [3]

8 Shaun is making patterns with matchsticks and counters.
The diagram shows Pattern 3 and Pattern 4.

(a) Write down the ratio sticks : counters
for the pattern.
Give your answer in its simplest form.

..... [2]

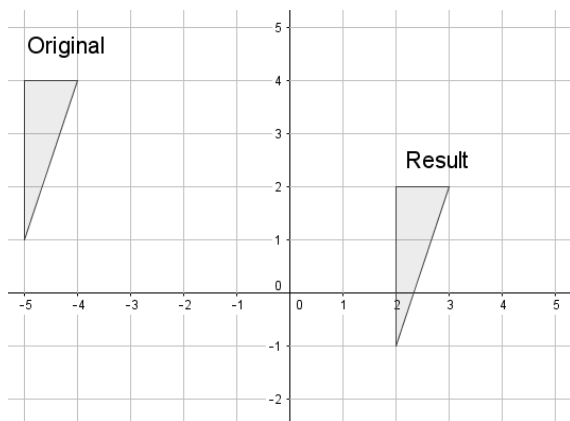
(b) Complete these statements.

Pattern 10 has sticks. [1]

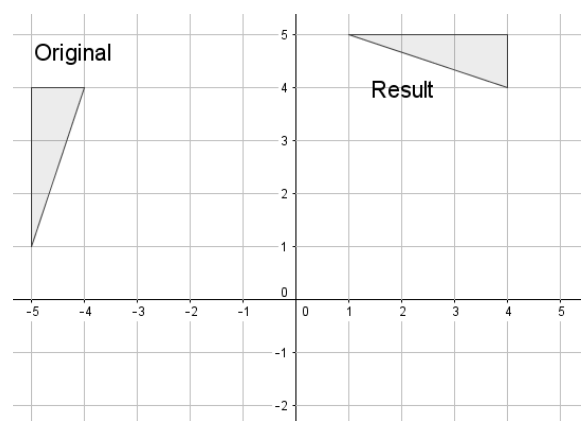
Pattern n

10 Describe each transformation in full.

(i)



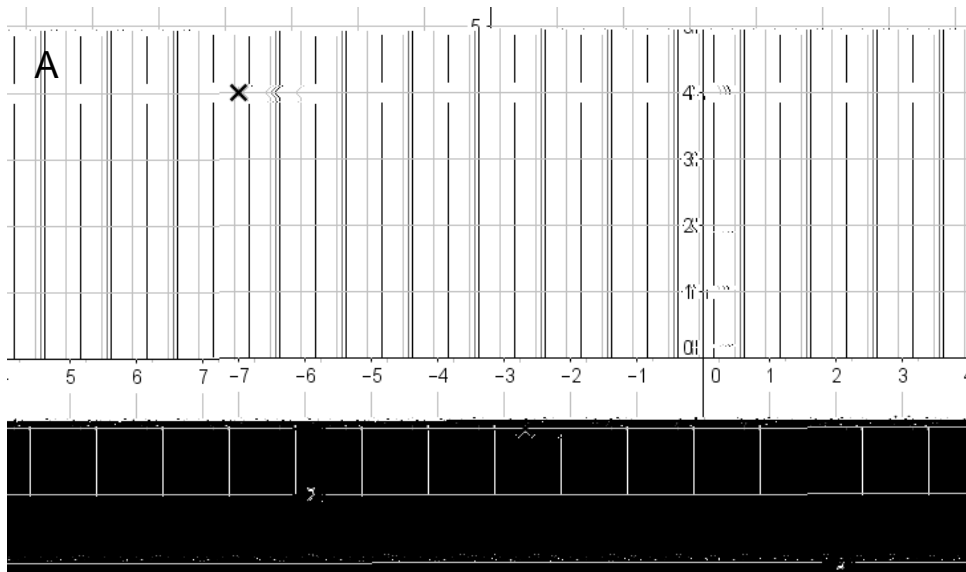
(ii)



(i) [1]

(ii)
 [2]

(b) The point C divides the line AB in the ratio 1 : 4.



Write down the coordinates of the point C.
 [2]

11 Which of the following is equal to $\frac{4.5 \times 10^2}{8^2 + \sqrt{36} + \sqrt[3]{125}}$?

Circle your answer.

- 1.2 4.2 6 6.2 8.5 11.4

[2]

