HIGHER

3.6 Geometric Transformations: Reflection, Rotation, Enlargement and Translation: 10-minute Pack

EDEXCEL 4MA1 · Calculator allowed · about 10 minutes

Total Marks

Name: _____ Date: ____ / ____ / _____

Answer ALL questions. Show all your working.

1 Triangle PQR has vertices P(-2, -1), Q(5, 0), R(2, -1). Its image P'Q'R' has vertices P'(-1, -3), Q'(13, -1), R'(7, -3).
Describe fully the single transformation that maps PQR onto P'Q'R'.

(Total for Question 1 is 4 marks)

2 Triangle ABC has vertices A(-4, 6), B(3, -5), C(-2, 0). Its image A'B'C' has vertices A'(6, -4), B'(-5, 3), C'(0, -2).
Describe fully the single transformation that maps ABC onto A'B'C'.

(Total for Question 2 is 3 marks)

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Mark scheme · 3.6 Geometric Transformations: Reflection, Rotation, Enlargement and Translation: 10-minute Pack

Question 1

identifies an enlargement	**B1**
scale factor from a pair of corresponding sides or distances: 2	**M1**
centre found where the lines joining corresponding vertices meet	**M1**
Enlargement with scale factor 2, centre (-3, 1)	**A1**

Answer: Enlargement with scale factor 2, centre (-3, 1)

Question 2

identifies a reflection (the shape is flipped, with the same size)	**B1**
finds the midpoint of A and A' or the perpendicular bisector of this pair of points	**M1**
Reflection in the line y = x	**A1**

Answer: Reflection in the line y = x

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