# Geometry

Unit 2 Transformation Practice A

Name:

Date: Period: 1 2 3 4 5 6

Standards: 22.0 Holt: 1.7

**1** What is the result of:
Reflection about x-axis

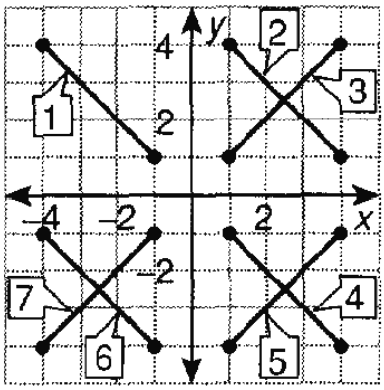
**2** What is the result of:
Reflection about y-axis

**3** What is the result of:
Reflection about y = x

**4** What is the result of:
Reflection about x-axis then a
Reflection about y-axis

**5** What is the result of:
Reflection about y-axis then a
Reflection about x-axis

**6** What is the result of:
Reflection about x-axis then a
Reflection about y-axis then a
Reflection about x-axis

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**7** Given point A has the coordinates (-8, 5).
If A is reflected across the x- axis, then the co-ordinates of A′ are:

**8** Given point A has the coordinates (-8, 6).
If A is reflected across the y- axis, then the co-ordinates of A′ are:

**9** Given point A has the coordinates (8, -2).
If A is reflected across the x- axis, then the co-ordinates of A′ are:

**10** Given point A has the coordinates (12, -1).
If A is reflected across the y- axis, then the co-ordinates of A′ are:

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**11** Given point A has the coordinates (4, -2).
If A is translated by the rule:
$(x, y) \rightarrow (x + 5, y - 2)$
Then the coordinates of A′ are:

**12** Given point A has the coordinates (2, -1).
If A is translated by the rule:
$(x, y) \rightarrow (x + 7, y - 3)$
Then the coordinates of A′ are:

**13** Given point A has the coordinates (4, -2).
If A is translated by the rule:
$(x, y) \rightarrow (x - 5, y - 1)$
Then the coordinates of A′ are:

**14** Given point A has the coordinates (2, -1).
If A is translated by the rule:
$(x, y) \rightarrow (x - 2, y + 6)$
Then the coordinates of A′ are:

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**15** The vertices of ΔXYZ are X(4,-2), Y(-3, 6) and Z(-2, -2). If ΔXYZ is translated 4units down and 3units to the left, then what are the coordinates of the vertices of ΔX′Y′Z′?

**16** The vertices of ΔXYZ are X(-1,0), Y(1, 7) and Z(2, 3). If ΔXYZ is translated 4units down and 3units to the left, then what are the coordinates of the vertices of ΔX′Y′Z′?

**17** If triangle GET is reflected about the x-axis, what are the coordinates of G′?

**18** If triangle GET is reflected about the x-axis, what are the coordinates of E′?

**19** If triangle GET is reflected about the x-axis, what are the coordinates of T′?

**20** If triangle MAN is reflected about the y-axis, what are the coordinates of M′?

**21** If triangle MAN is reflected about the y-axis, what are the coordinates of A′?

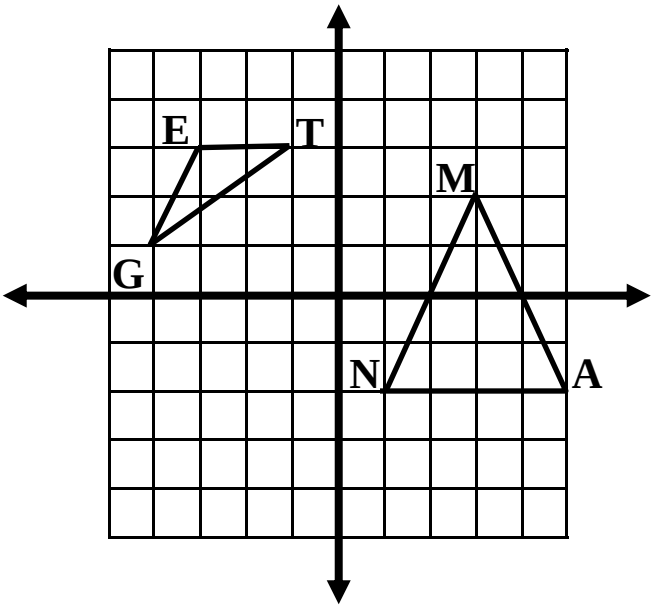
**22** If triangle MAN is reflected about the y-axis, what are the coordinates of N′?

**23** If triangle GET is rotated 180° about the origin what are the coordinates of G′?

**24** If triangle GET is rotated 180° about the origin what are the coordinates of T′?

**25** If triangle MAN is rotated 180° about the origin what are the coordinates of A′?

**26** If triangle MAN is rotated 180° about the origin what are the coordinates of N′?




Suppose ΔMAN is translated by the following rule:
$(x, y) \rightarrow (x+5, y-2)$

**27** What are the resulting coordinates of M?

**28** What are the resulting coordinates of A?

**29** What are the resulting coordinates of N?

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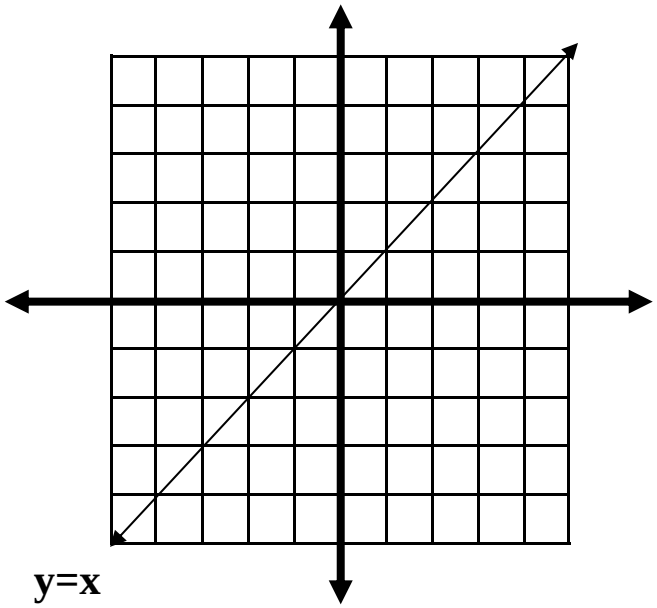


**30** Given the point (-2, 5). What are the coordinates of a reflection across y=x?

**31** Given the point (3, 5). What are the coordinates of a reflection across y=x?

**32** Given the point (4, -1). What are the coordinates of a reflection across y=x?

**33** Given the point (-6, -4). What are the coordinates of a reflection across y=x?

**34** Given the point (-2, -1). What are the coordinates of a reflection across y=x?