Regents Exam Questions G.CO.A.5: Reflections 1b www.jmap.org

## G.CO.A.5: Reflections 1b

- 1 Point A is located at (4,-7). The point is reflected in the x-axis. Its image is located at
- 2 When the point (2,-5) is reflected in the *x*-axis, what are the coordinates of its image?
- 3 What is the image of point (-3,7) after a reflection in the *x*-axis?
- 4 What are the coordinates of point (2,-3) after it is reflected over the *x*-axis?
- 5 Point (-2,3) is reflected in the *x*-axis. In which quadrant does its image lie?
- 6 Reflecting (5,1) in the y-axis yields an image of
- 7 The image of point (3,4) when reflected in the *y*-axis is
- 8 What is the image of the point (2,-3) after the transformation  $r_{y-axis}$ ?
- 9 What are the coordinates of point *P*, the image of point (3,-4) after a reflection in the line y = x?
- 10 What is the image of (5,-2) under the transformation  $r_{y=x}$ ?
- 11 If the point (2,-5) is reflected in the line y = x, then the image is
- 12 The coordinates of point *A* are (-3a, 4b). If point *A'* is the image of point *A* reflected over the line y = x, the coordinates of *A'* are
- 13 What is the image of point (-3,-1) under a reflection in the origin?
- 14 The point (-3, -2) is reflected in the origin. The coordinates of its image are

- 15 A function, f, is defined by the set {(2,3),(4,7),(-1,5)}. If f is reflected in the line y = x, which point will be in the reflection? 1) (5,-1)
  - 2) (-5,1)
  - 3) (1,-5)
  - 4) (-1,5)
- 16 What is the image of (4,3) after a reflection over the line y = 1?
- 17 Which transformation of the line x = 3 results in an image that is perpendicular to the given line?
  - 1)  $r_{x-axis}$ 2)  $r_{y-axis}$
  - 2)  $r_{y-axis}$
  - 3)  $r_{y=x}$
  - 4)  $r_{x=1}$
- 18 If M(-2,8) is reflected in the y-axis, what are the coordinates of M', the image of M?
- 19 Find the image of (1,5) when it is reflected over the line y = x.
- 20 Find the image of P(2,-5) under the transformation  $r_{y=x}$ .
- 21 Find the image of P(4,-2) under the transformation  $r_{y=x}$ .
- 22 Find the coordinates of the image of point (5,2) after a reflection in the line y = x.
- If point *P* with coordinates (*a*,*b*) is reflected in the line y = x, what are the coordinates of the image of *P*?

Name: \_\_\_\_\_

## G.CO.A.5: Reflections 1b Answer Section

1	ANS: (4,7)	
2	REF: ANS: (2,5)	060905ge
3	REF: ANS: (-3,-7	010007a )
4	REF: ANS: (2,3)	010918a
5	REF: ANS: III	080713a
6	REF: ANS: (-5,1)	060825a
7	REF: ANS: (-3,4)	019017siii
8	REF: ANS: (-2,-3	spring9803a )
9	REF: ANS: (-4,3)	081108ge
10	REF: ANS: (-2,5)	060306b
11	REF: ANS: (-5,2)	069628siii
	REF:	069735siii

12 ANS: (4b, -3a)REF: 081113ge 13 ANS: (3,1)REF: 080418a 14 ANS: (3,2) REF: 068824siiii 15 ANS: 1 REF: 060710b 16 ANS: (4, -1)3 - 1 = 21 - 2 = -1REF: 082317geo 17 ANS: 3 REF: 081021ge 18 ANS: (2,8)REF: 089003siii 19 ANS: (5,1) REF: 068005siii 20 ANS: (-5,2)REF: 010405siii 21 ANS: (-2, 4)REF: 019809siii 22 ANS: (2,5) REF: 010306siii 23 ANS: (*b*,*a*) REF: 068605siii