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 $r_{y-\text { axis }}$ ?

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 $(-3 a, 4 b)$. If point $A^{\prime}$ is the image of point $A$ reflected over the line $y=x$, the coordinates of $A^{\prime}$ 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

Name: $\qquad$


#### Abstract




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) $r_{x \text {-axis }}$
2) $r_{y \text {-axis }}$
3) $r_{y=x}$
4) $r_{x=1}$

18 If $M(-2,8)$ is reflected in the $y$-axis, what are the coordinates of $M^{\prime}$, 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 $y=x$.

23 If point $P$ with coordinates $(a, b)$ is reflected in the line $y=x$, what are the coordinates of the image of $P$ ?

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

## Answer Section

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

12 ANS:
$(4 b,-3 a)$
REF: 081113ge
13 ANS:
$(3,1)$
REF: 080418a
14 ANS:
$(3,2)$
REF: 068824siiii
15 ANS: 1
REF: 060710b
16 ANS:
$(4,-1)$
$3-1=2$
$1-2=-1$

REF: 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

