

EduSahara™ Learning Center Assignment**Grade : Class VIII, ICSE****Chapter : Symmetry, Reflection and Rotation****Name : Reflection****Licensed To : Teachers and Students for non-commercial use**

1. Find the image of the point $(1, 5)$ when reflected in x-axis

(i) $(2, -5)$ (ii) $(1, -5)$ (iii) $(-1, -5)$ (iv) $(-1, 5)$ (v) $(-5, 1)$

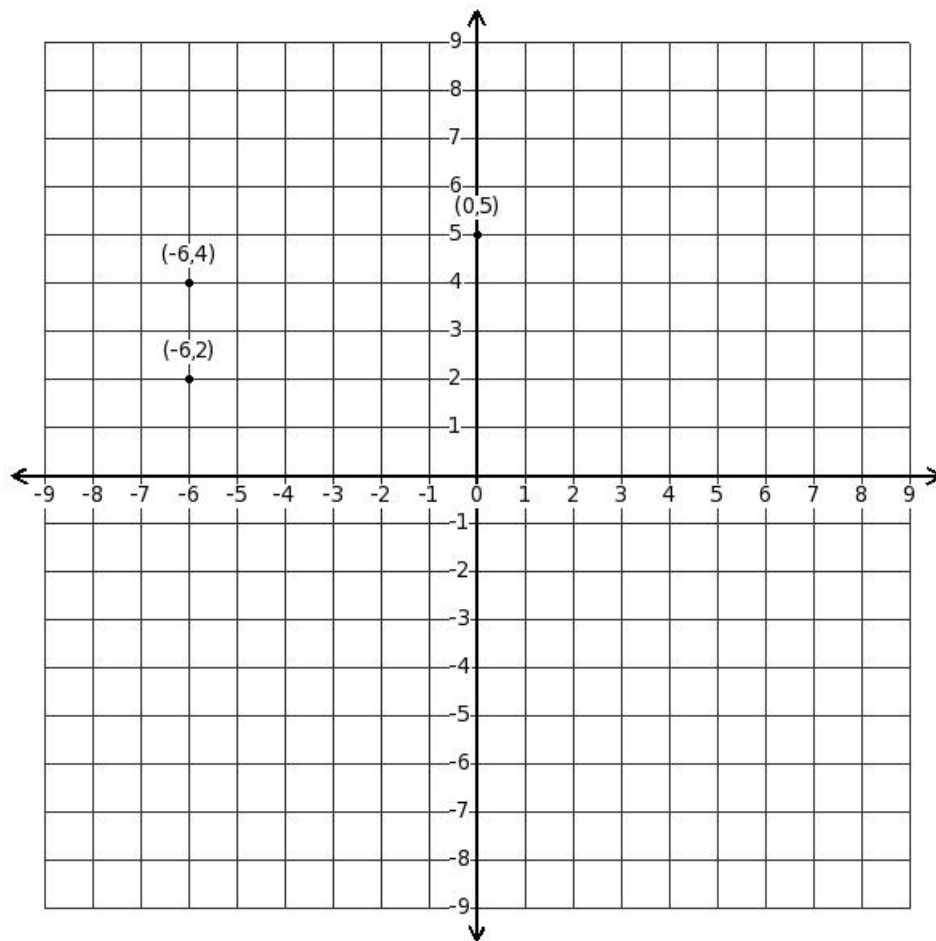
2. Find the image of the point $(7, -7)$ when reflected in y-axis

(i) $(-6, -7)$ (ii) $(-7, 7)$ (iii) $(7, 7)$ (iv) $(-7, -7)$

3. Find the image of the point $(-4, 1)$ when reflected in the origin

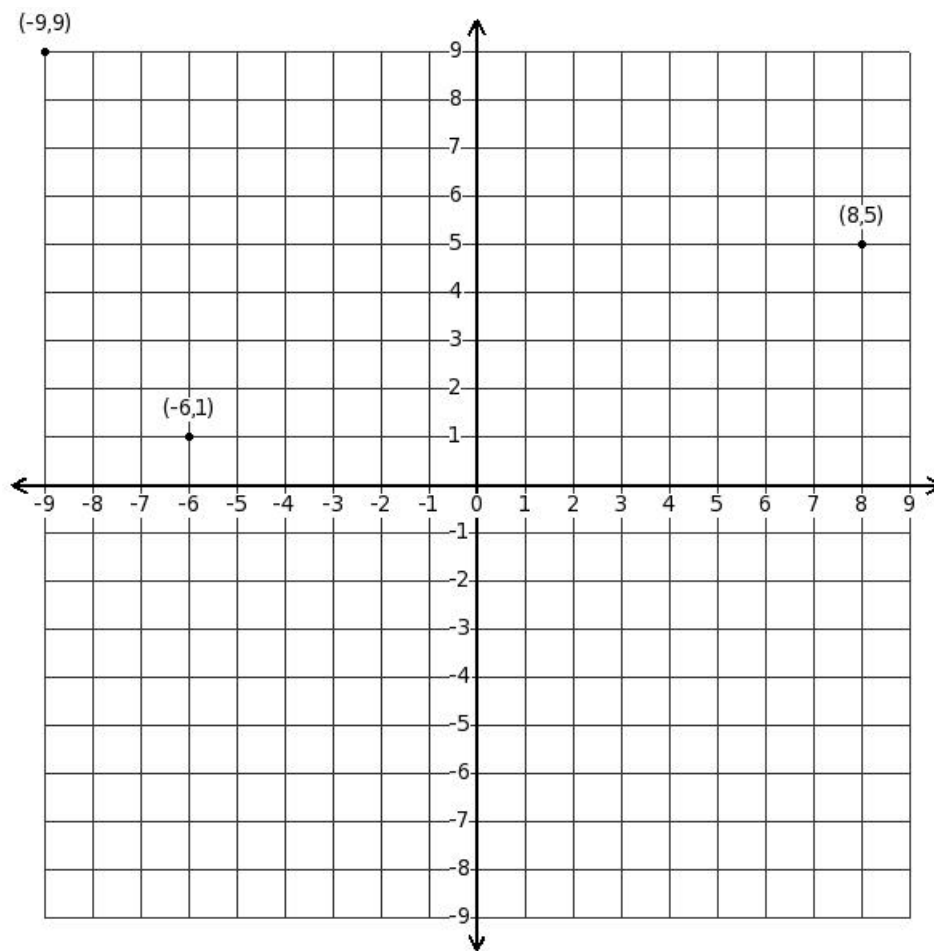
(i) $(5, -1)$ (ii) $(4, -1)$ (iii) $(4, 1)$ (iv) $(-4, -1)$ (v) $(-1, 4)$

4. Write down the coordinates when reflected in the x-axis



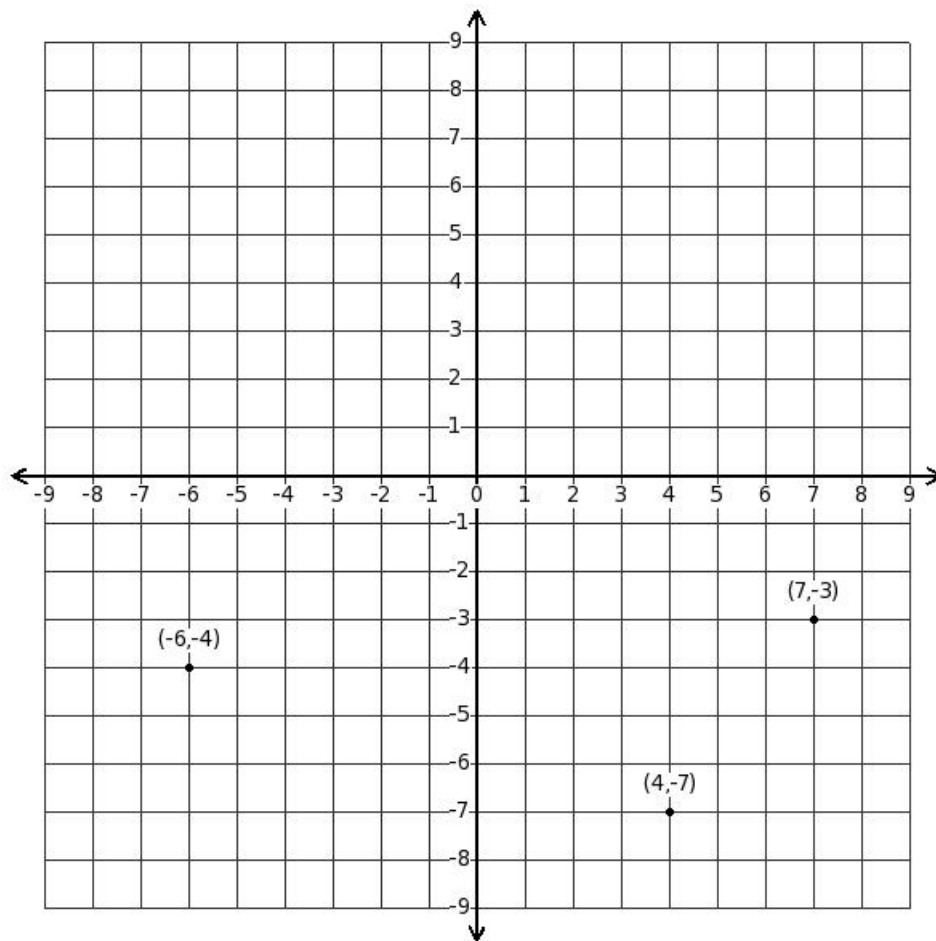
- (i) $(0, (-5)), ((-6), (-4)), ((-5), (-3))$
 - (ii) $(0, (-5)), ((-6), (-4)), ((-6), (-2))$
 - (iii) $((-1), (-4)), ((-6), (-4)), ((-6), (-2))$
 - (iv) $(0, (-5)), ((-6), (-4)), ((-8), (-4))$
 - (v) $(0, (-5)), ((-4), (-2)), ((-6), (-2))$
-

5. Write down the coordinates when reflected in the y-axis



- (i) $(6, 1), ((-8), 5), (9, 9)$
- (ii) $(5, 2), ((-8), 5), (9, 9)$
- (iii) $(6, 1), ((-8), 5), (7, 7)$
- (iv) $(6, 1), ((-8), 5), (10, 8)$
- (v) $(6, 1), ((-6), 7), (9, 9)$

6. Write down the coordinates when reflected in the origin



- (i) $((-4), 7), (6, 4), ((-6), 2)$
- (ii) $((-4), 7), (6, 4), ((-7), 3)$
- (iii) $((-4), 7), (8, 6), ((-7), 3)$
- (iv) $((-5), 8), (6, 4), ((-7), 3)$
- (v) $((-4), 7), (6, 4), ((-9), 1)$

Write down the coordinates when reflected in the x-axis

7. $(6, (-7)), ((-5), (-3)), (8, 0)$
- (i) $(6, 7), ((-5), 3), (8, 0)$
 - (ii) $(5, 8), ((-5), 3), (8, 0)$
 - (iii) $(6, 7), ((-5), 3), (9, (-1))$
 - (iv) $(6, 7), ((-5), 3), (6, (-2))$
 - (v) $(6, 7), ((-3), 5), (8, 0)$

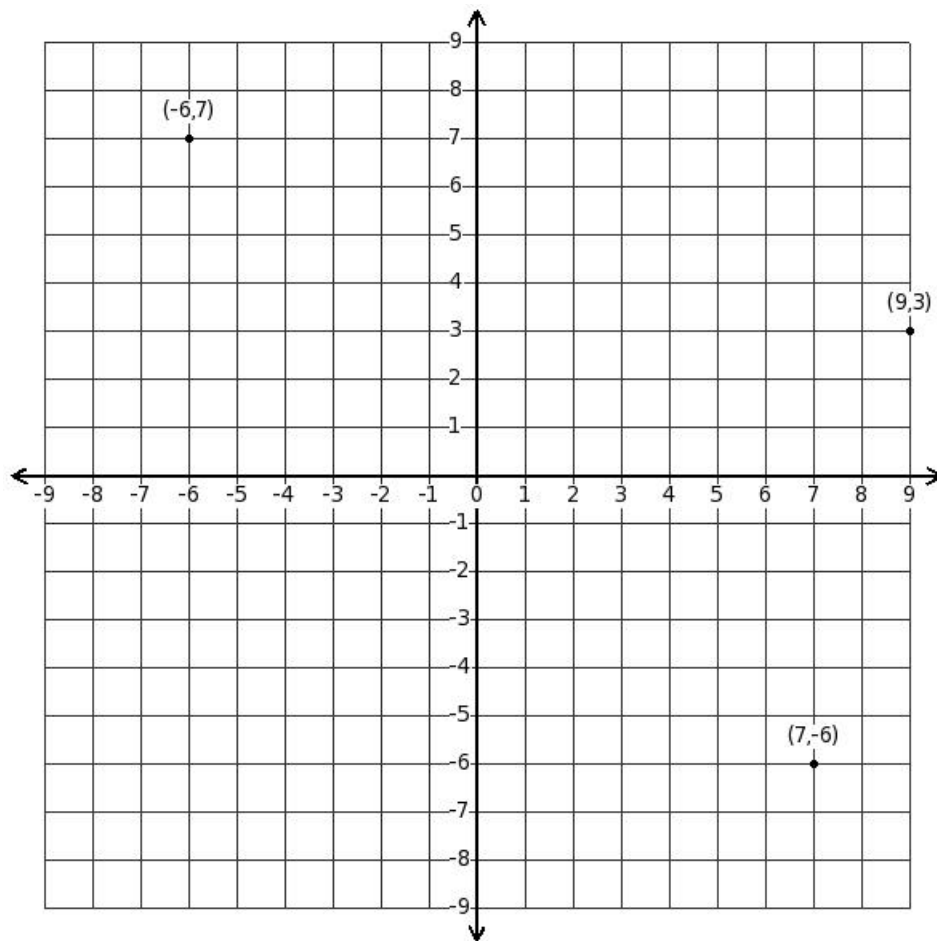
Write down the coordinates when reflected in the y-axis

8. $(9, (-9)), ((-5), 6), ((-9), (-9))$
- (i) $((-9), (-9)), (7, 8), (9, (-9))$
- (ii) $((-9), (-9)), (5, 6), (10, (-10))$
- (iii) $((-9), (-9)), (5, 6), (9, (-9))$
- (iv) $((-9), (-9)), (5, 6), (7, (-11))$
- (v) $((-10), (-8)), (5, 6), (9, (-9))$
-

Write down the coordinates when reflected in the origin

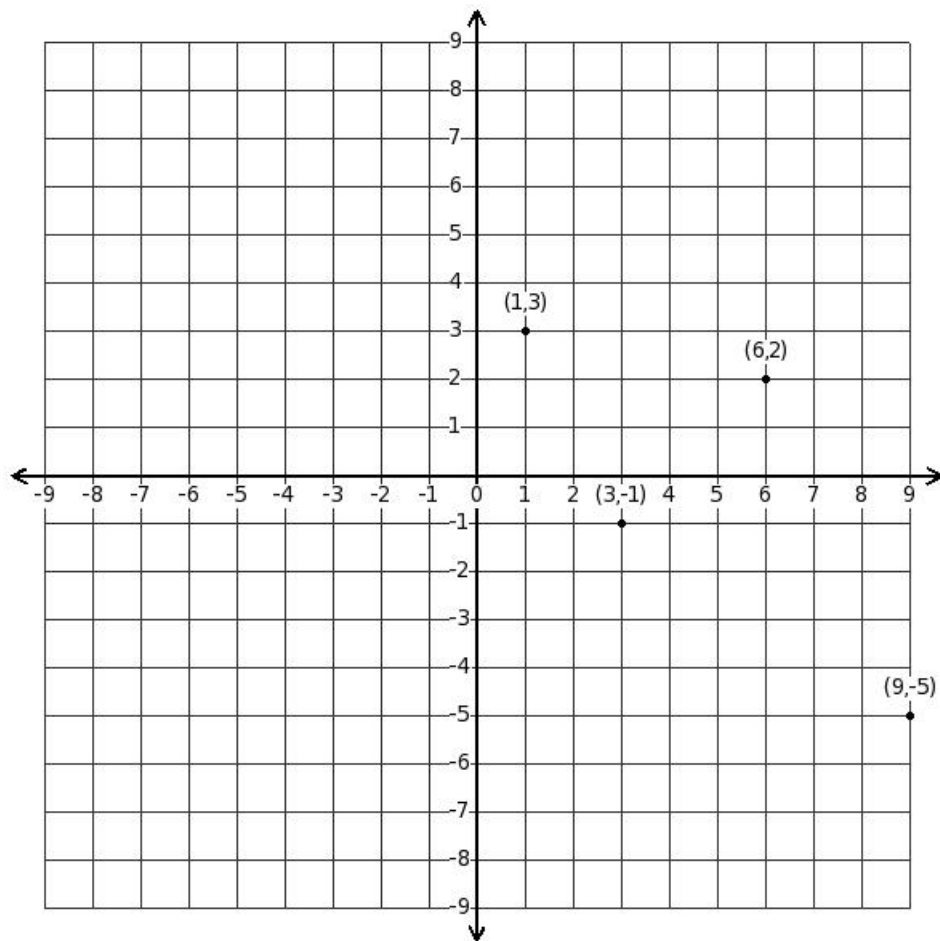
9. $(5, 1), ((-8), 1), (9, 5)$
- (i) $((-6), 0), (8, (-1)), ((-9), (-5))$
- (ii) $((-5), (-1)), (10, 1), ((-9), (-5))$
- (iii) $((-5), (-1)), (8, (-1)), ((-9), (-5))$
- (iv) $((-5), (-1)), (8, (-1)), ((-8), (-6))$
- (v) $((-5), (-1)), (8, (-1)), ((-11), (-7))$
-

10. Write down the coordinates when reflected in the x-axis



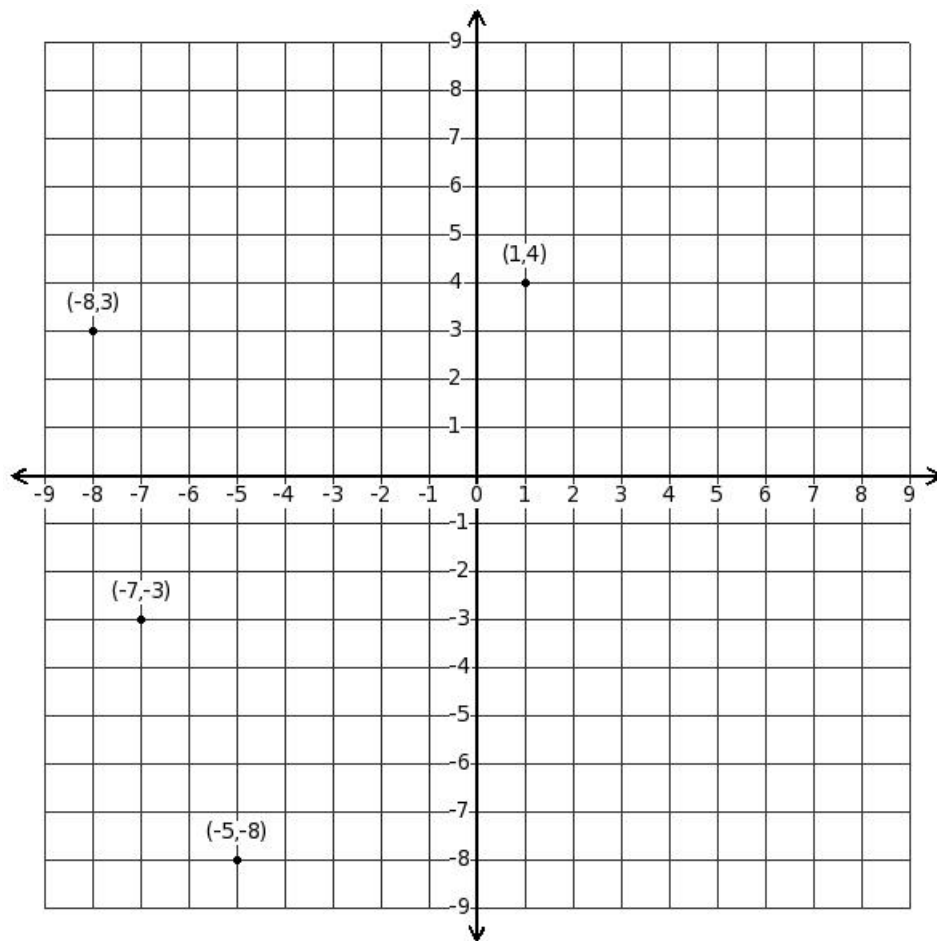
- (i) $((-6), (-7)), (9, (-3)), (5, 4)$
- (ii) $((-7), (-6)), (9, (-3)), (7, 6)$
- (iii) $((-6), (-7)), (11, (-1)), (7, 6)$
- (iv) $((-6), (-7)), (9, (-3)), (7, 6)$
- (v) $((-6), (-7)), (9, (-3)), (8, 5)$

11. Write down the coordinates when reflected in the y-axis



- (i) $(1, 5), ((-3), (-1)), ((-6), 2), ((-9), (-5))$
- (ii) $((-1), 3), ((-3), (-1)), ((-6), 2), ((-10), (-4))$
- (iii) $((-1), 3), ((-3), (-1)), ((-6), 2), ((-9), (-5))$
- (iv) $((-1), 3), ((-3), (-1)), ((-8), 0), ((-9), (-5))$
- (v) $((-1), 3), ((-3), (-1)), ((-5), 1), ((-9), (-5))$

12. Write down the coordinates when reflected in the origin



- (i) $(8, (-3)), ((-1), (-4)), (6, 7), (7, 3)$
- (ii) $(8, (-3)), ((-1), (-4)), (3, 6), (7, 3)$
- (iii) $(8, (-3)), ((-1), (-4)), (5, 8), (7, 3)$
- (iv) $(10, (-1)), ((-1), (-4)), (5, 8), (7, 3)$
- (v) $(8, (-3)), ((-1), (-4)), (5, 8), (6, 4)$

Write down the coordinates when reflected in the x-axis

13.

- $(9, (-5)), (7, 4), (9, 0), ((-8), (-3))$
- (i) $(9, 5), (7, (-4)), (9, 0), ((-9), 4)$
- (ii) $(9, 5), (7, (-4)), (7, (-2)), ((-8), 3)$
- (iii) $(11, 7), (7, (-4)), (9, 0), ((-8), 3)$
- (iv) $(9, 5), (7, (-4)), (10, (-1)), ((-8), 3)$
- (v) $(9, 5), (7, (-4)), (9, 0), ((-8), 3)$

Write down the coordinates when reflected in the y-axis

14. $((-6), (-9)), (3, (-2)), ((-7), (-5)), ((-7), (-9))$
- (i) $(6, (-9)), ((-3), (-2)), (5, (-7)), (7, (-9))$
- (ii) $(6, (-9)), ((-3), (-2)), (7, (-5)), (7, (-9))$
- (iii) $(8, (-7)), ((-3), (-2)), (7, (-5)), (7, (-9))$
- (iv) $(6, (-9)), ((-3), (-2)), (8, (-6)), (7, (-9))$
- (v) $(6, (-9)), ((-3), (-2)), (7, (-5)), (6, (-8))$
-

Write down the coordinates when reflected in the origin

15. $((-1), (-4)), ((-3), 6), ((-3), (-2)), (4, (-9))$
- (i) $(1, 4), (3, (-6)), (3, 2), ((-5), 10)$
- (ii) $(3, 6), (3, (-6)), (3, 2), ((-4), 9)$
- (iii) $(1, 4), (3, (-6)), (4, 1), ((-4), 9)$
- (iv) $(1, 4), (3, (-6)), (3, 2), ((-4), 9)$
- (v) $(1, 4), (3, (-6)), (1, 0), ((-4), 9)$
-

Find the coordinates of the reflection

16. of the point $(5, (-5))$ in line $(-3y) = 0$
- (i) $(3, 3)$ (ii) $(7, 7)$ (iii) $(4, 6)$
- (iv) $(6, 4)$ (v) $(5, 5)$
-

Find the coordinates of the reflection

17. of the point $(2, 0)$ in line $(13x - 65) = 0$
- (i) $(8, 0)$ (ii) $(6, (-2))$ (iii) $(7, 1)$
- (iv) $(9, (-1))$ (v) $(10, 2)$
-

18. Which of the following points is invariant under reflection in x-axis

- (i) $(4, 9)$ (ii) $(8, 0)$ (iii) $((-5), (-9))$ (iv) $((-9), 1)$ (v) $(6, (-1))$
-

19. Which of the following points is invariant under reflection in y-axis

(i) $(3, -9)$ (ii) $(-3, -1)$ (iii) $(0, 1)$ (iv) $(7, 5)$ (v) $(-5, 2)$

Find the image of the point A $(-7, 6)$

20.

under the reflection of a point P $(\frac{1}{2}, 4\frac{1}{2})$

(i) $(10, 5)$ (ii) $(6, 1)$ (iii) $(9, 2)$ (iv) $(8, 3)$ (v) $(7, 4)$

Assignment Key

- 1) (ii)
- 2) (iv)
- 3) (ii)
- 4) (ii)
- 5) (i)
- 6) (ii)
- 7) (i)
- 8) (iii)
- 9) (iii)
- 10) (iv)
- 11) (iii)
- 12) (iii)
- 13) (v)
- 14) (ii)
- 15) (iv)
- 16) (v)
- 17) (i)
- 18) (ii)
- 19) (iii)
- 20) (iv)