

Find the coordinates of the vertices of each figure after the given transformation.

1. reflection across $x = 2$
 $D(0, -5)$
2. reflection across $y = 2$
 $C(1, 1)$
3. rotation 180° counterclockwise about the origin
 $V(-5, -5)$
4. rotation 90° counterclockwise about the origin
 $G(0, 5)$
5. translation: 8 units right and 4 units down
 $C(-4, 1)$
6. rotation 180° counterclockwise about the origin
 $R(-4, 4)$
7. reflection across $x = 2$
 $U(0, -4)$
8. reflection across $y = -1$
 $D(2, -4)$
9. translation: 3 units right and 3 units down
 $G(2, 2)$
10. reflection across $x = -1$
 $M(-5, 3)$
11. rotation 180° counterclockwise about the origin
 $G(-3, -1)$
12. reflection across $y = -1$
 $R(1, -4)$
13. translation: 1 units left and 3 units up
 $H(4, -1)$
14. reflection across the x -axis
 $W(-2, -3)$
15. translation: 3 units down
 $F(3, 2)$
16. reflection across $y = 2$
 $D(-3, -1)$
17. translation: 5 units left and 2 units up
 $A(5, 0)$
18. translation: 2 units left and 6 units up
 $B(5, -2)$
19. reflection across the y -axis
 $D(-1, 4)$
20. rotation 180° counterclockwise about the origin
 $H(2, -1)$