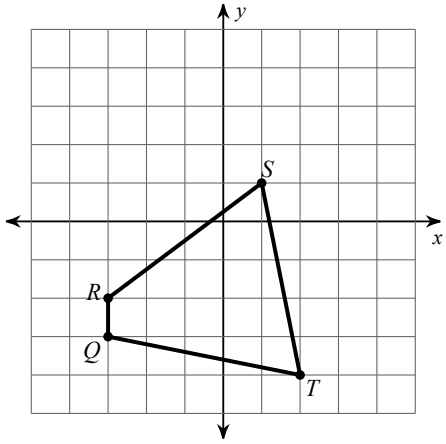
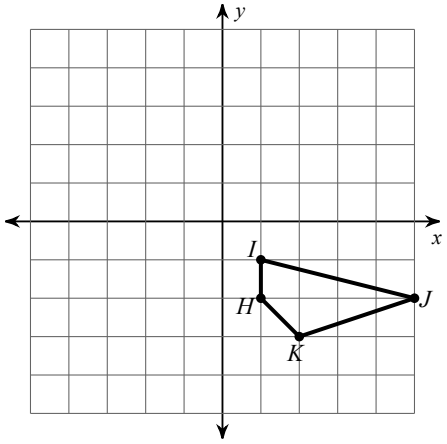
Math 1 - §11.1B Name_____

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

1) translation: 1 unit up

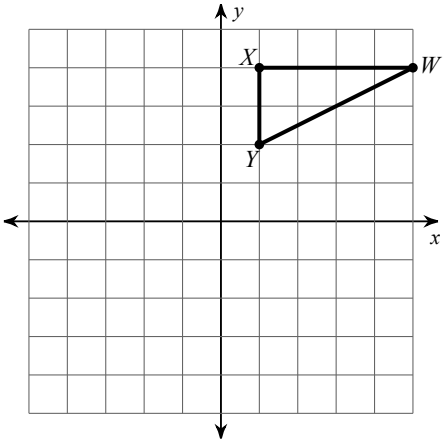


2) translation: 4 units left and 6 units up

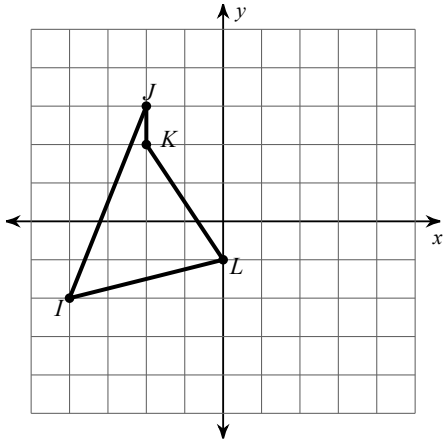


Graph the image of the figure using the transformation given.

3) translation: 3 units left and 7 units down

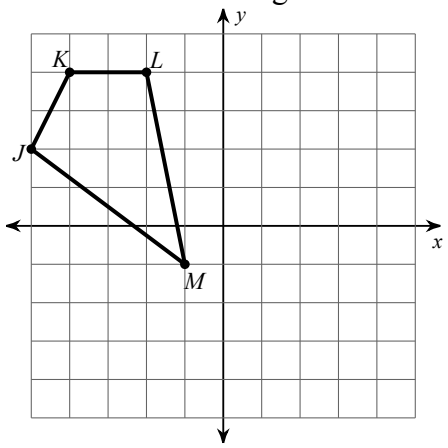


4) translation: 3 units right and 2 units up

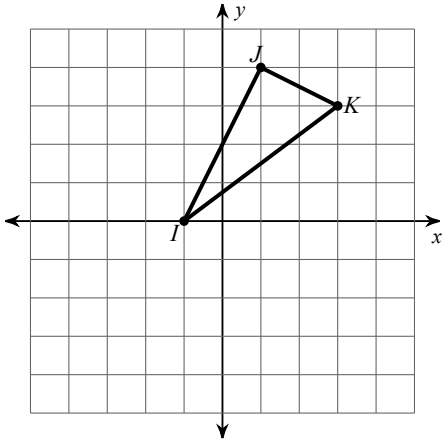


Find the coordinates of the vertices of each figure after the given transformation.

5) translation: 3 units right and 2 units down



6) translation: $(x, y) \rightarrow (x, y - 2)$



Solve each equation.

7) $60 = 3(5 + 3r)$

8) $-2x + 5(3x - 3) = -67$

9) $-100 = 5(-5 + 5n)$

10) $-63 = -3(1 - 5x)$

11) $135 = 5(5m - 2) + 4m$

12) $-69 = 1 - 5(3m + 2)$

13) $-3(5 - 4n) = -75$

14) $-5(3 - 5r) - 3 = 82$

15) $3(3x + 4) = 57$

16) $76 = -5(-4 - 2n) + 4n$

17) $2(-4k + 2) = -4(1 + 2k)$

18) $-7(x - 2) = 4x + 4(1 - 4x)$

19) $-6r + 7(5r + 3) = -5r + 5(7r + 3)$

20) $4(3 - 3v) = -2(6v - 6)$