

Worksheet: Translations

1. What is the result of translating the point (3,4) by 2 units right and 5 units down?
 - a. (1,9)
 - b. (5,-1)
 - c. (3,9)
 - d. (5,1)
2. If a point (x,y) is translated by (a,b), what is the new position?
 - a. (x+a,y+b)
 - b. (x-a,y-b)
 - c. (x+a,y-b)
 - d. (x-a,y+b)
3. Translate the point (0,-3) by 4 units left and 2 units up.
 - a. (-4,5)
 - b. (-4,-1)
 - c. (4,-1)
 - d. (4,5)
4. Which translation moves every point 3 units up?
 - a. Add 3 to the y-coordinate.
 - b. Add 3 to the x-coordinate.
 - c. Subtract 3 from the y-coordinate.
 - d. Subtract 3 from the x-coordinate.
5. What is the image of (7,2) after a translation of (-2,6)?
 - a. (9,8)
 - b. (5,-4)
 - c. (5,8)
 - d. (9,-4)
6. A triangle has vertices at (1,1),(4,1),(1,5). What are the vertices after translating by (2,-3)?
 - a. (3,-2),(6,-2),(3,2)
 - b. (3,4),(6,4),(3,8)
 - c. (1,4),(4,4),(1,8)
 - d. (2,-2),(5,-2),(2,2)
7. Which translation will move a point from (2,8) to (7,3)?
 - a. (+5,+5)
 - b. (+5,-5)
 - c. (-5,-5)
 - d. (-5,+5)
8. Translate (-6,2) by 6 units right and 4 units down.
 - a. (0,6)

- b. $(-12,-2)$
 - c. $(0,-2)$
 - d. $(12,6)$
9. A rectangle is translated so that each vertex (x,y) becomes $(x+4,y-1)$. What is the translation vector?
- a. $(-4,1)$
 - b. $(4,1)$
 - c. $(4,-1)$
 - d. $(-4,-1)$
10. If the point $(5,-7)$ is translated by $(-3,9)$, where does it move to?
- a. $(8,2)$
 - b. $(2,-16)$
 - c. $(2,2)$
 - d. $(8,-16)$
11. What is the translation that moves $(0,0)$ to $(-4,3)$?
- a. $(4,3)$
 - b. $(-4,-3)$
 - c. $(-4,3)$
 - d. $(4,-3)$
12. Which point is the image of $(9,-1)$ after translating by $(-5,-2)$?
- a. $(14,-3)$
 - b. $(4,-3)$
 - c. $(4,1)$
 - d. $(14,1)$
13. A translation moves every point 8 units to the left. What is the translation vector?
- a. $(0,8)$
 - b. $(-8,0)$
 - c. $(8,0)$
 - d. $(0,-8)$
14. Translate the point $(-2,-5)$ by $(3,7)$.
- a. $(1,2)$
 - b. $(-5,-12)$
 - c. $(5,2)$
 - d. $(1,-2)$
15. Which translation will move a point from $(4,10)$ to $(4,2)$?
- a. $(0,8)$
 - b. $(8,0)$
 - c. $(0,-8)$
 - d. $(-8,0)$