

HALLOWEEN TRANSFORMATIONS



1. Get a piece of graph paper from the front table. Draw your x and y axis all the way across the paper.
2. Graph a rectangle with vertices at $(-3, 5)$, $(-3, 8)$, $(-5, 5)$, and $(-5, 8)$. Color this shape black.
3. Translate the rectangle from #2 $(x, y) \rightarrow (x+10, y)$. Color this black.
4. Graph a shape with vertices $(-7, 5)$, $(-5, 5)$, $(-5, 8)$, $(-3, 8)$, $(-3, 10)$, and $(-7, 10)$. Color yellow.
5. Translate the shape from #4 $(x, y) \rightarrow (x+10, y)$. Color yellow.
6. Graph a triangle with vertices $(2, 2)$, $(-2, 2)$, and $(-2, -2)$. Color black.
7. Reflect the triangle from #6 across $y=x$. Color black.
8. Graph a Δ with vertices $(-7, -4)$, $(-5, -4)$, and $(-6, -7)$. Color white.
9. Translate the Δ from #8 $(x+6, y)$. Color white.
10. Translate the Δ from #8 $(x+12, y)$. Color white.
11. Graph a Δ with vertices $(-4, -10)$, $(-2, -10)$, and $(-3, -7)$. Color white.
12. Reflect the Δ from #11 across the y -axis. Color white.
13. Graph a shape with vertices $(-1, 4)$, $(-9, -4)$, $(-9, -6)$, $(-8, -6)$, $(-8, -8)$, $(-6, -8)$, $(-6, -10)$, and $(0, -10)$.
14. Reflect the shape from #13 across the y -axis. Color the enclosed space black.
15. Graph a shape with vertices $(-13, 0)$, $(-13, 8)$, $(-12, 8)$, $(-12, 10)$, $(-10, 10)$, $(-10, 12)$, $(-8, 12)$, $(-8, 13)$, and $(0, 13)$.
16. Reflect the shape from #15 across the y -axis.
17. Reflect the shape from #15 across the x -axis.
18. Reflect the shape from #15 across the line $y=x$. Color in the enclosed shape orange.