

Warm Up:

$$(-6, 0)$$

Solve the following system:

$$(3x + 2y = -18) \cdot 2$$

$$(2x + 9y = -12) \cdot -3$$

$$6x + 4y = -36$$

$$-6x - 27y = 36$$

$$\hline -23y = 0$$

$$y = 0$$

$$3x + 2(0) = -18$$

$$3x = -18$$

$$x = -6$$

6.2 - Composition of Transformations

What are the three different rigid transformations?

What is a composition of transformations?

When more than one transformation occurs.

Investigation 6.2 on sketchpad

Reflections across Parallel Lines Conjecture: a composition of two reflections across two parallel lines is equivalent to a single translation. In addition, the distance from any point to its second image under the two reflections is twice the distance between the parallel lines.

Reflections across Intersecting Lines Conjecture: A composition of two reflections across a pair of intersecting lines is equivalent to a single rotation. The angle of rotation is twice the acute angle between the pair of intersecting reflection lines.

Glide Reflection: A special two-step transformation combining a [redacted] with a [redacted]

