**Do Now**: Transformations warmup and review

Communicate your answers with text and with mathematical notation.

**1.**

**

**2.**

**

**3.**

Triangle *DEG* has the coordinates *D*(-2, 1), *E*(-3, 4), and *G*(3, 3). Triangle *DEG* is translated *T*+3, +1 . Complete the table mapping each coordinate pair onto its image, then plot and label both triangles on the grid.

*T*+3, +1

*D*(-2, 1) →

*E*(-3, 4) →

*G*(3, 3) →

**

Justify that the transformation preserves distance.

**5.**

**6.** The point *A* is located at (4, -7). The point is reflected in the *y*-axis.

Its image is located at

**7.**

**8.**

**9.**

**

**10.**

**

**

**1**

Triangle *DEG* has the coordinate *D*(1, 1), *E*(5, 1), and *G*(5, 4). Triangle *DEG* is translated *T*+2, -6 . Make a table mapping each coordinate pair into its image, then plot both triangles on the grid.

**

Justify that the transformation preserves distance.

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