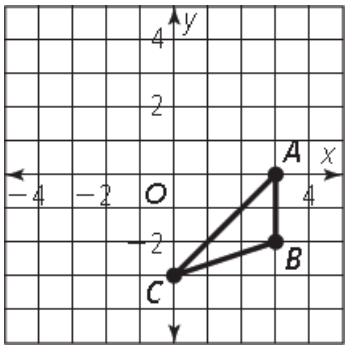
Name _____

3-2 Quick Check - Translations

For Items 1 and 2, use △*ABC*.



1. What are the vertices of △*A′B′C′* produced by $T_{\langle -3, 6\rangle}$ (△*ABC*) = △*A′B′C′*?

A *A′*(0, 6), *B′*(0, 4), *C′*(−3, 3)

B *A′*(6, 6), *B′*(6, 4), *C′*(3, 3)

C *A′*(0, −6), *B′*(0, −8), *C′*(−3, 9)

D *A′*(6, −6), *B′*(6, −8), *C′*(3, 9)

2. Suppose △*DEF* is the image of a translation of △*ABC*. If *D* is at (−6, −2), what translation rule maps △*ABC* to △*DEF*?

A $T_{\langle 9, 2\rangle}$ (△*ABC*) = △*DEF*

B $T_{\langle 9, -2\rangle}$ (△*ABC*) = △*DEF*

C $T_{\langle -9, 2\rangle}$ (△*ABC*) = △*DEF*

D $T_{\langle -9, -2\rangle}$ (△*ABC*) = △*DEF*

3. Suppose the equation of line *p* is *x* = 2 and the equation of line *q* is *x* = −1. What translation is equivalent to $(R_p \circ R_q)$(△*ABC*)?

4. What is the composition of the translations $(T_{\langle -3, 4\rangle} \circ T_{\langle 8, \_7\rangle})(x, y)$ as one translation?

5. How far apart are parallel lines *m* and *n* such that $T_{\langle 0, \_12\rangle}$ (△*XYZ*) = $(R_n \circ R_m)$(△*XYZ*)?