

TransmoGrapher2

Exploration Questions

1. Pick a partner. Both of you create a triangle with these vertices:

- $(0, 0)$
- $(0, 4)$
- $(6, 0)$

Each of you should translate, reflect, and rotate your triangle as much as you want. Make sure you keep track of the things you did. Now switch computers and see if you can get your partner's triangle back to its home position (keep track of the moves you did). Now compare the moves you did to move the triangle with your partner's moves to get it back. Are they the same? Explain.

2. Pick a partner. Both of you create a square with these vertices:

- $(0, 0)$
- $(0, 5)$
- $(5, 5)$
- $(5, 0)$

Each of you should translate, reflect, and rotate your square as much as you want. Make sure you keep track of the things you did. Now switch computers and see if you can get your partner's square back in to its home position (keep track of the moves you did). Now compare the moves you did to move the square with your partner's moves to get it back. Are they the same? Explain.

3. Pick a partner. Both of you create a parallelogram with these vertices:

- $(0, 0)$
- $(0, 4)$
- $(3, 6)$
- $(3, 2)$

Each of you should translate, reflect, and rotate your parallelogram as much as you want. Make sure you keep track of the things you did. Now switch computers and see if you can get your partner's parallelogram back in to its home position (keep track of the moves you did). Now compare the moves you did to move the parallelogram with your partner's moves to get it back. Are they the same? Explain.