

## A Puzzle for the Area of a Parallelogram

**Supplementary material for groups that move at a faster pace than other groups in the class**

Paste the following pieces on cardboard and cut them out.

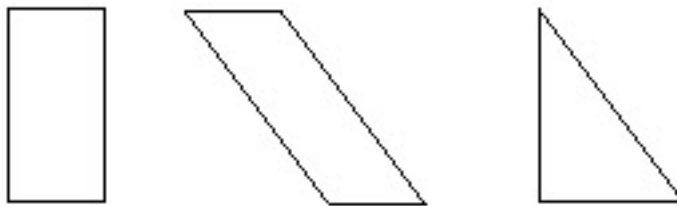


Figure 1

With the parallelogram and the triangle form the following puzzle.

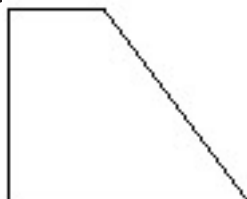


Figure 2



Figure 3

Now use the rectangle and the triangle to form the puzzle.

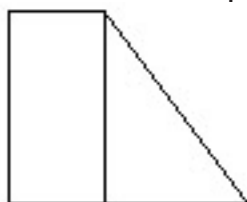


Figure 4

What can you say about the area of the parallelogram and the area of the rectangle?

- The base of the parallelogram is equal to the base of the rectangle. You can see this by overlapping the two bases or by comparing Figure 3 with Figure 4.
- The height of the parallelogram is equal to the height of the rectangle. You can see this by comparing figures 3 and 4.
- What can you conclude about the area of a parallelogram with respect to the area of the rectangle with the same base and the same height?