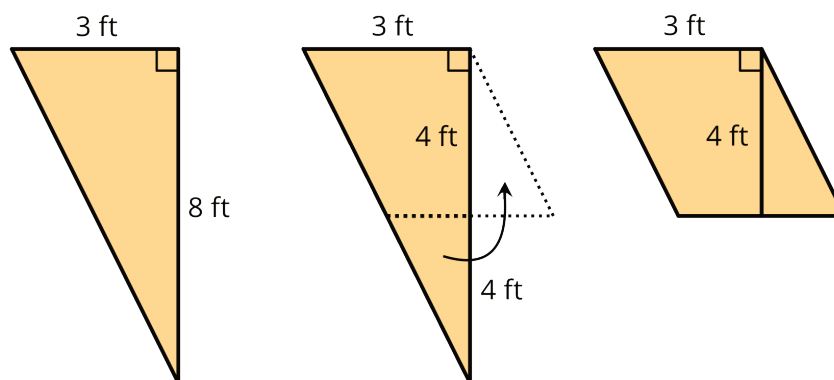
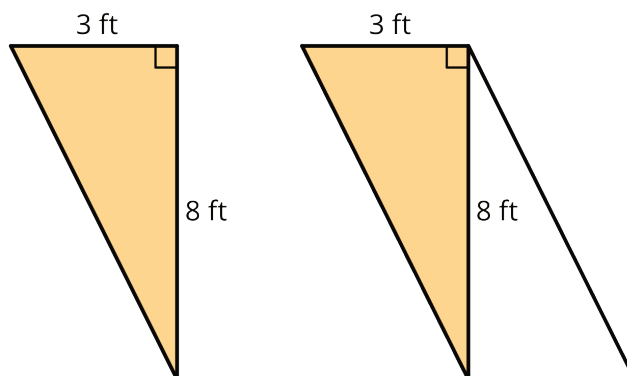


Lesson 8 Practice Problems

1. To find the area of this right triangle, Diego and Jada used different strategies. Diego drew a line through the midpoints of the two longer sides, which decomposes the triangle into a trapezoid and a smaller triangle. He then rearranged the two shapes into a parallelogram.



Jada made a copy of the triangle, rotated it, and lined it up against one side of the original triangle so that the two triangles make a parallelogram.

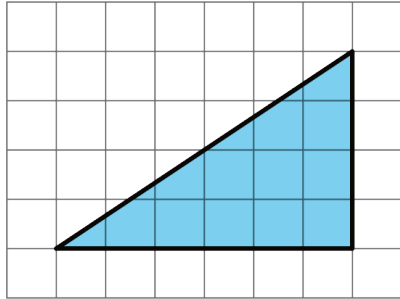


- a. Explain how Diego might use his parallelogram to find the area of the triangle.

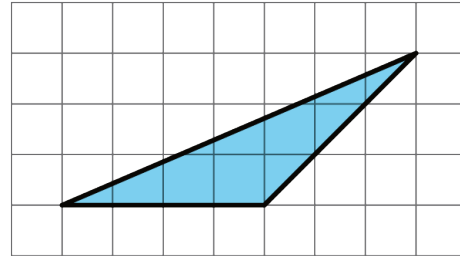
- b. Explain how Jada might use her parallelogram to find the area of the triangle.

2. Find the area of the triangle. Explain or show your reasoning.

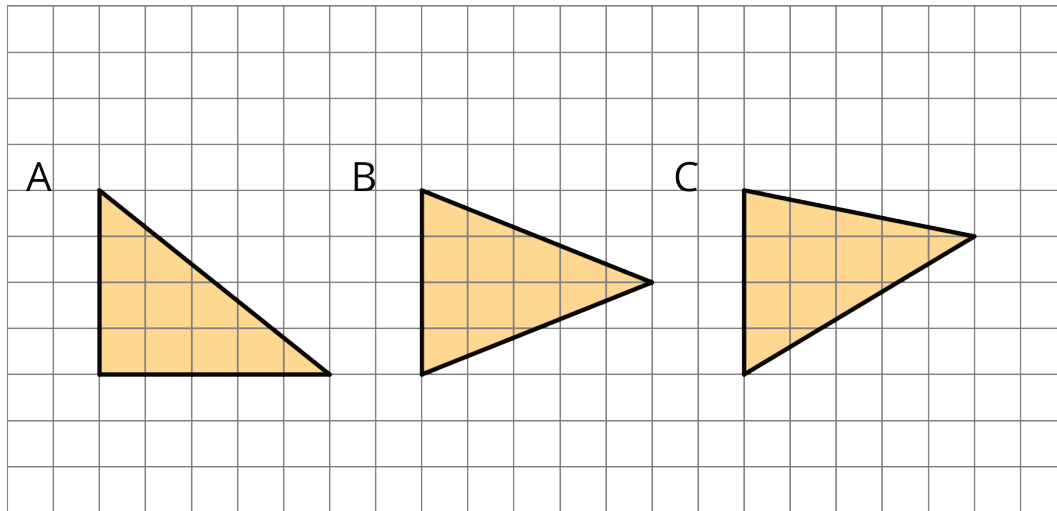
a.



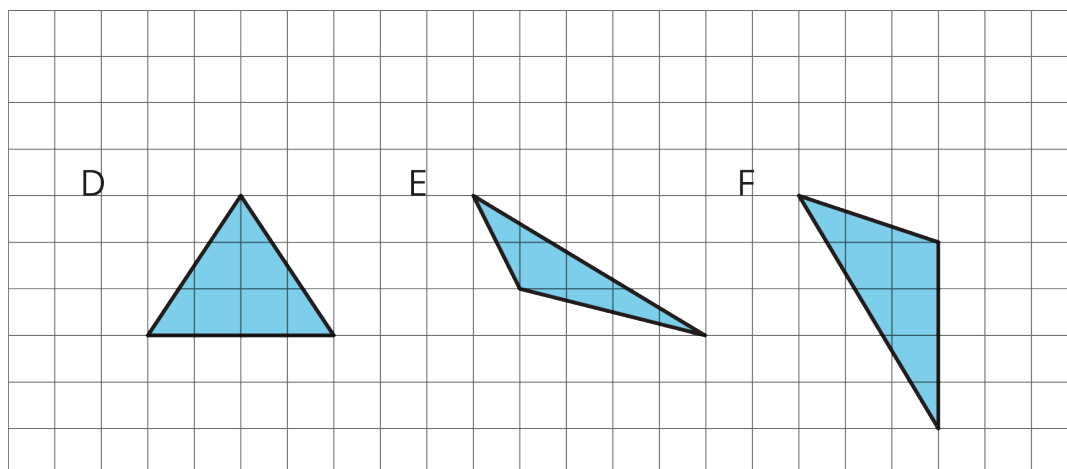
b.



3. Which of the three triangles has the greatest area? Show your reasoning. If you get stuck, try using what you know about the area of parallelograms.



4. Draw an identical copy of each triangle such that the two copies together form a parallelogram. If you get stuck, consider using tracing paper.



(From Unit 1, Lesson 7.)

5. a. A parallelogram has a base of 3.5 units and a corresponding height of 2 units. What is its area?
- b. A parallelogram has a base of 3 units and an area of 1.8 square units. What is the corresponding height for that base?
- c. A parallelogram has an area of 20.4 square units. If the height that corresponds to a base is 4 units, what is the base?

(From Unit 1, Lesson 6.)