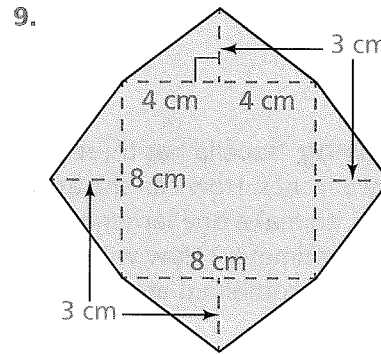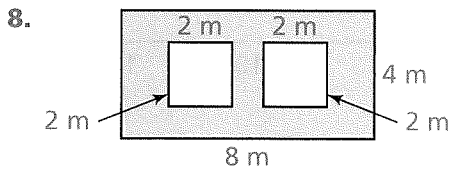Name: _____

Practice & Problem Solving ✏️ ⏻

In 6–9, find the area of each polygon or shaded region.

6.

26 ft

15 ft

5 ft→

3 ft   4 ft

7. 2 cm↘   16 cm   ↙2 cm

10 cm

8.

2 m   2 m

4 m

2 m↗   ↖2 m

8 m

9.

3 cm

4 cm   4 cm

8 cm

8 cm

3 cm
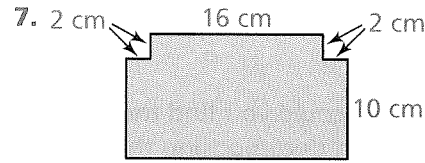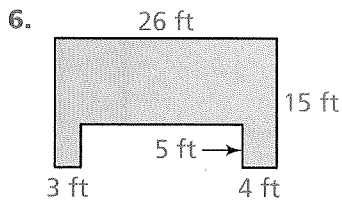
**In 10 and 11, find the area in square units of each polygon.**

10.

11.
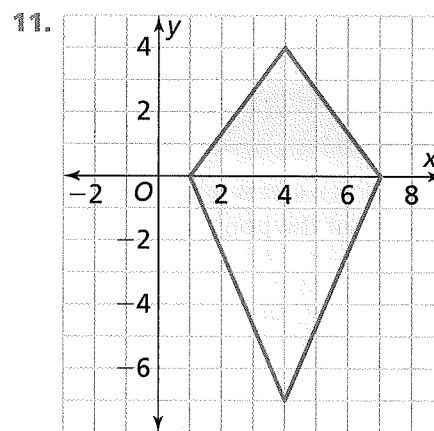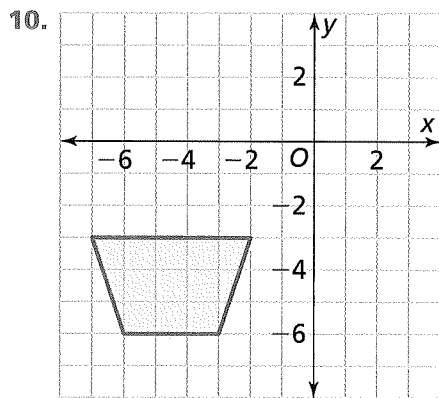
12. Be Precise Diego is designing an exercise room. How many square feet of rubber flooring will he need to cover the floor? The product is sold in whole square yards. How many square yards should Diego buy? Explain.

15 ft

9 ft

8 ft

14 ft
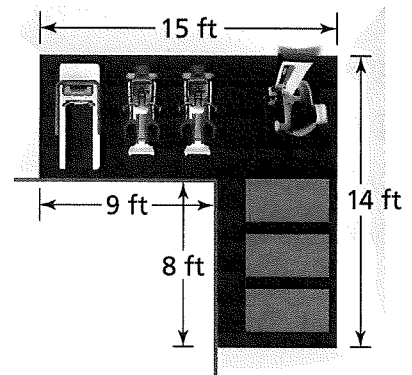
In 13 and 14, use the diagram at the right.

13. David drew this diagram of a picture frame that he is going to make. Each square represents 1 square inch. What is the area of the picture frame?

14. **Use Structure** How could you find the area of the picture frame without decomposing the frame into smaller shapes?
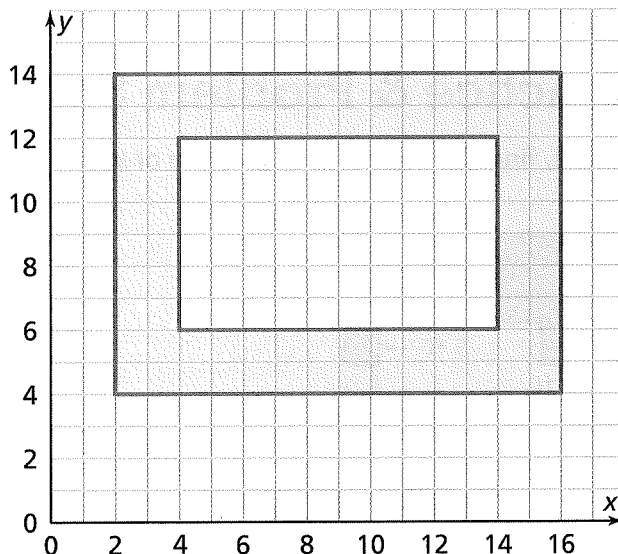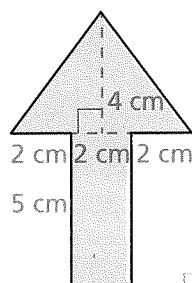

15. **Higher Order Thinking** Isabella has three rectangular cards that are 4 inches by 5 inches. How can she arrange the cards, without overlapping, to make one larger polygon with the smallest possible perimeter? How will the area of the polygon compare to the combined area of the three cards?

Assessment Practice

16. Which of the following expressions can be used to find the area of the polygon?

    Ⓐ $(2 \times 5) + (6 \times 4)$

    Ⓑ $(5 \times 2) + 2 \cdot \frac{1}{2}(3 \times 4)$

    Ⓒ $(6 \times 5) - (3 \times 4)$

    Ⓓ $(6 \times 9) - (3 \times 4)$

17. What is the area of the polygon at the right?

    Ⓐ 86 square units

    Ⓑ 78 square units

    Ⓒ 70 square units

    Ⓓ 68 square units