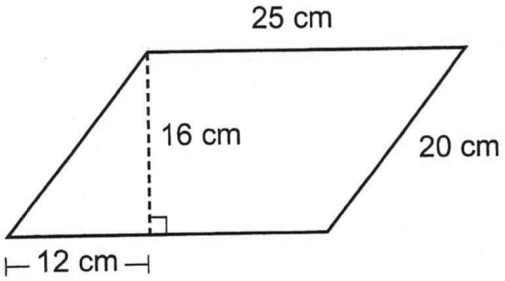
6.8D: Determine solutions for problems involving the area of rectangles, parallelograms, trapezoids, and triangles and volume of right rectangular prisms where dimensions are positive rational numbers (Readiness Standard)

(6.1B)

1. The diagram below shows a parallelogram and its dimensions.



What is the area of the parallelogram, in square centimeters?

Record your answer in the boxes. Then fill in the bubbles. Be sure to use the correct place value.

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⊕ ⊖	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9		0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9

(6.1A; 6.1B)

2. A rectangular swimming pool is 20 feet long, 15 feet wide, and 6 feet deep. How much water is needed to fill the pool completely?

A 3,600 ft^3

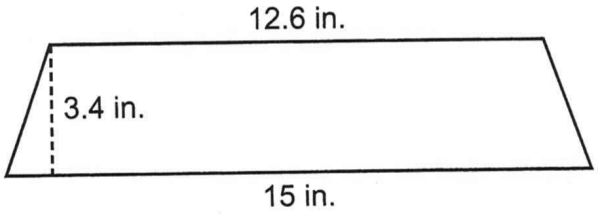
B 1,800 ft^3

C 300 ft^3

D 41 ft^3

(6.1B)

3. The diagram below shows a trapezoid and its dimensions.



What is the area of the trapezoid?

A 8.16 $in.^2$

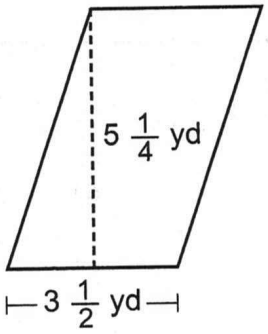
B 31 $in.^2$

C 46.92 $in.^2$

D 642.6 $in.^2$

(6.1A; 6.1B)

4. Jill cut a piece of cardboard in the shape of a parallelogram. The diagram below represents the cardboard.



If Jill paints one side of the cardboard, she will need enough paint to cover an area of—

A $8\frac{3}{4}$ yd^2

B $17\frac{1}{2}$ yd^2

C $18\frac{3}{8}$ yd^2

D $73\frac{1}{2}$ yd^2