

Lesson 7: Drawing Parallelograms

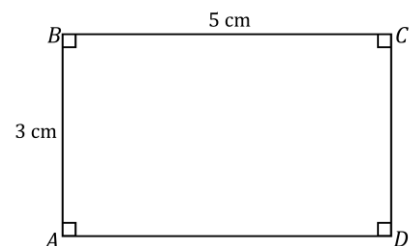
Classwork

Example 1

Use what you know about drawing parallel lines with a setsquare to draw rectangle with dimensions of your choice. State the steps you used to draw your rectangle, and compare those steps to those of a partner's.

Example 2

Use what you know about drawing parallel lines with a setsquare to draw rectangle with dimensions of your choice. Write a plan for the steps you will take to draw .



Example 3

Use a setsquare, ruler and protractor to draw parallelogram $ABCD$ so that the measurement of $\angle A$ is 45° , the measurement of $\angle B$ is 135° , and the altitude to BC is 3 cm.

Exercise 1

Use a setsquare, ruler, and protractor to draw parallelogram $ABCD$ so that the measurement of $\angle A$ is 60° , the measurement of $\angle B$ is 120° , and the altitude to BC is 4 cm.

Example 4

Use a setsquare, ruler and protractor to draw rhombus _____ so that the measurement of _____, the measurement of _____, and each side of the rhombus measures _____ cm.

Problem Set

1. Draw rectangle with cm and cm.
2. Use a setsquare, ruler and protractor to draw parallelogram so that the measurement of , cm, , and the altitude to is cm.
3. Use a setsquare, ruler and protractor to draw rhombus so that the measurement of , and each side of the rhombus measures cm.

The following table contains partial information for a parallelogram . Using no tools, make a sketch of the parallelogram. Then use a ruler, protractor, and setsquare to draw an accurate picture.

			Altitude to		Altitude to
4.		cm		cm	
5.		cm		cm	
6.		cm	cm		

7. Use what you know about drawing parallel lines with a setsquare to draw trapezoid with parallel sides and . The length of is cm and the length of cm; the height between the parallel sides is cm. Write a plan for the steps you will take to draw .
8. Draw rectangle with cm and cm using appropriate tools.
9. Challenge: Determine the area of the largest rectangle that will fit inside an equilateral triangle with side length cm.