Area of a trapezoid

Solve the problems.

1) Find the area of a trapezoid with bases of 12 centimeters and 9 centimeters, and a height of 5 centimeters.

2) What is the height of the trapezoid, if area of the trapezoid is 42 ft^2 and the sum of the bases are 19ft?

3) If the lengths of the parallel bases are 15.5 inches and 13.4 inches then height of a trapezoid is 5 inches. Find the area of the trapezoid?

4) The area of a trapezoid is 66 square meters and the bases are 13 meters and 12 meters. Find the height of a trapezoid?

5) What are the lengths of the parallel sides of the trapezoid with an area of 100 m^2, if one of the parallel sides is three times as long as the other and the height of the trapezoid is 10 m?

6) What is the area of a trapezoid, if its height is 7.6 feet and the length of one of its base is two times the length of the other base, which is of 3.2 feet?

7) The sum of the parallel bases and the height of a trapezoid are 16 feet and 4.7 yards respectively. Determine the area of the trapezoid in square yards.

8) If its area is 92 m^2, height is 14 m and the length of the shorter side is 3 m shorter than the longer side. What are the lengths of the parallel sides of a trapezoid?

9) ABCD is a trapezoid, in which the side AD is parallel to BC and is 7 inches longer than the side BC. What are the lengths of the parallel sides, if the area of the trapezoid is 42 square inches and the height is 4 inches?

Area of a trapezoid

Name:_____   Date:_____

Solve the problems.

1) Find the area of a trapezoid with bases of 12 centimeters and 9 centimeters, and a height of 5 centimeters.

   52.5 square centimeters

2) What is the height of the trapezoid, if area of the trapezoid is 42 ft^2 and the sum of the bases are 19ft?

   4.42 feet

3) If the lengths of the parallel bases are 15.5 inches and 13.4 inches then height of a trapezoid is 5 inches. Find the area of the trapezoid?

   72.25 square inches

4) The area of a trapezoid is 66 square meters and the bases are 13 meters and 12 meters. Find the height of a trapezoid?

   5.28 meters

5) What are the lengths of the parallel sides of the trapezoid with an area of 100 m^2, if one of the parallel sides is three times as long as the other and the height of the trapezoid is 10 m?

   5m and 15m

6) What is the area of a trapezoid, if its height is 7.6 feet and the length of one of its base is two times the length of the other base, which is of 3.2 feet?

   36.48 square feet

7) The sum of the parallel bases and the height of a trapezoid are 16 feet and 4.7 yards respectively. Determine the area of the trapezoid in square yards.

   12.53 square yards

8) If its area is 92 m^2, height is 14 m and the length of the shorter side is 3 m shorter than the longer side. What are the lengths of the parallel sides of a trapezoid?

   5.071 m and 8.071 m

9) ABCD is a trapezoid, in which the side AD is parallel to BC and is 7 inches longer than the side BC. What are the lengths of the parallel sides, if the area of the trapezoid is 42 square inches and the height is 4 inches?

   7 inches and 14 inches