NAME _____ Key _____ DATE _____ SCORE _____

Areas of Trapezoids

Find the area of each trapezoid.

1.
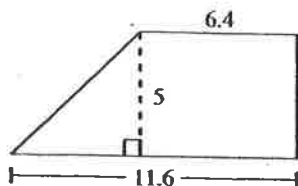
$A =$ __45__

2.
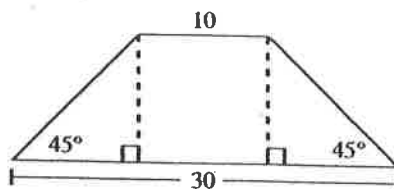
$A =$ __200__

3.
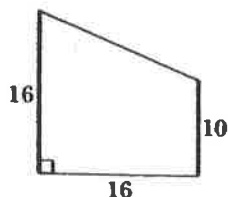
$A =$ __208__

4.
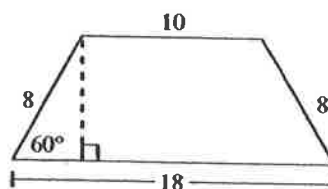
$A =$ __$56\sqrt{3}$__

5.
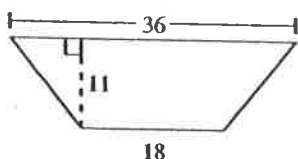
$A =$ __297__

6.
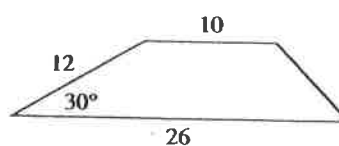
$A =$ __108__

7. A trapezoid has area 112 and median 16. What is its height? __7__

8. A trapezoid has area 72 and height 9. How long is its median? __8__

9. An isosceles trapezoid has base angles of 45° and bases of lengths 12 and 32. Find its area. __220__
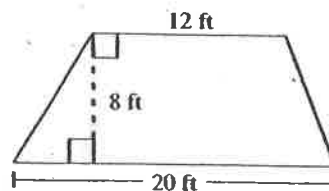
10. Find the height and perimeter of an isosceles trapezoid with bases 36 and 60 and area 768. $h =$ __16__, $p =$ __136__

11. Find the area and the length of the median of an isosceles trapezoid with legs 10 and bases 14 and 26. $A =$ __160__, length of median = __20__

12. Find the height of a trapezoid with bases 9 and 6 and area 120. __16__

13. The area of a trapezoid is 144 km². The shorter base is 15 km and the height is 6 km. Find the longer base. __33 km__

14. Find the area of the flower garden shown. __128 ft²__

Ex. 14

median $= \frac{1}{2}(b_1 + b_2)$

$A = \frac{1}{2} h (b_1 + b_2)$

$112 = 16 \cdot h$