

# Notes #13: Area of Trapezoids (Section 11.3)

## Trapezoids

$base_1 =$

$median =$

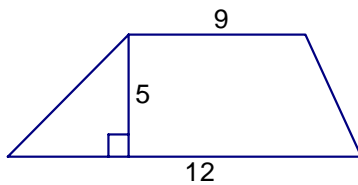
$base_2 =$

$height =$

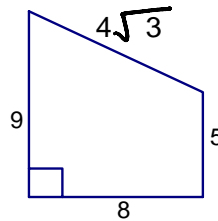
## Area of a Trapezoid

Find the area of each trapezoid. You may need to draw your own altitude(s)

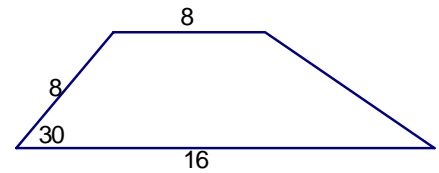
1.



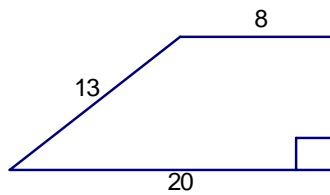
2.



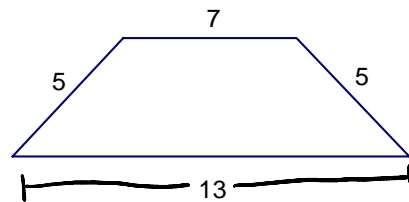
3.



4.



5.



Complete the table referring to trapezoids;  $b_1$  (base 1),  $b_2$  (base 2),  $h$  (height),  
 $A$  (area),  $m$  (median)

|       | 6.   | 7.                | 8. | 9.           |
|-------|------|-------------------|----|--------------|
| $b_1$ | 6 cm | 8 in              | 8  | 6            |
| $b_2$ | 8 cm | 10 in             |    |              |
| $h$   | 5 cm |                   | 5  | $4\sqrt{3}$  |
| $A$   |      | $54 \text{ in}^2$ | 50 | $12\sqrt{3}$ |
| $m$   |      |                   |    |              |

6.)

7.)

8.)

9.)

10.) A 3 x 7ft rectangular vegetable garden is surrounded by a 1ft wide rock path. What is the area of the path only?

11.) The base of a rectangle is 3cm longer than its height. If its area is  $18 \text{ cm}^2$ , find its base and height.