PA Notes Name: _____

Week 13: 10.3 / 10.4

AREAS OF PARALLELOGRAMS AND TRAPEZOIDS 10.3

PARALLELOGRAMS:

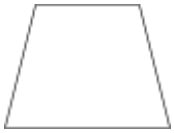
1. base : _____ of any one of its sides
2. height : perpendicular distance between the _____ and the side

   _____ the base

$A = b \cdot h$	Area of a parallelogram is the product of the base and the height	

TRAPEZOIDS:

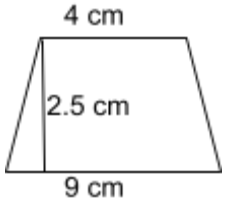
1. bases : lengths of the _____ sides
2. height : perpendicular distance between the _____

$A = \frac{1}{2}h(b_1 + b_{2)}$	Area of a trapezoid is one half of the product of the height and the sum of the bases.	

EXAMPLES:

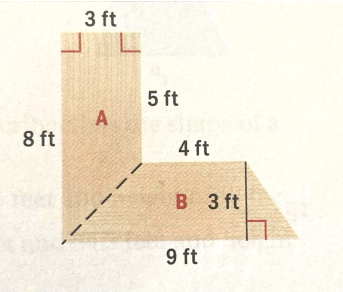
1. The base of a parallelogram is 5 inches. The height is twice the base. Find the area.

2. Find the area of the trapezoid:



3. The height of a trapezoid is 6 m. One of its bases is 8 m. The area of the trapezoid is 54 sq. m. Find the other base.

4. Find the area of this figure:



CIRCUMFERENCE AND AREA OF A CIRCLE 10.4

VOCAB:

1. radius : distance between the _____ and any point in the circle (½ way across)
2. diameter : distance _____ the circle through the center (all the way across)
3. circumference : distance _____ the circle

CIRCUMFERENCE FORMULAS:	AREA FORMULA:
$C = \pi \cdot d$ $\quad C = 2 \cdot \pi \cdot r$	$A = \pi \cdot r^2$

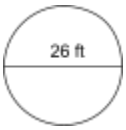
EXAMPLES:

1. The circumference of a circle is _____ inches. Find the radius to the nearest inch.

2. The diameter of a circle is _____ ft. Find the circumference to the nearest foot.

3. The circumference of a circle is _____ cm. Find the radius to the nearest cm.

4. Find the area of this circle to the nearest sq. ft.



5. The diameter of a circle is _____ in. Find the area to the nearest sq. in.

6. The area of a circle is 72 sq. mm. Find the radius of the circle to the nearest mm.

7. $A = 59\ ft^2$
   $d =$ _____

8. $A = 1567\ in^2$
   $r =$ _____