

Name: _____

Problem Set SOLUTIONS G7 M3 L19:

Date: _____

Roster # _____

1.

$A = \frac{1}{2}bh$
 $A = \frac{1}{2} \cdot 9 \cdot 3$
 $A = \frac{1}{2} \cdot 27$

Area = 13.5 sq. units

2.

$d = 6$ so $r = 3$

$A = \frac{\pi r^2}{2}$
 $A = \frac{(3.14) \cdot (3)^2}{2}$
 $A = \frac{(3.14) \cdot 9}{2}$
 $A = \frac{(3.14) \cdot 9}{2}$
 $A = \frac{28.26}{2} = 14.13 u^2$

≈ 14.13 sq. units

3.

$A = b \cdot h$
 $A = 8 \cdot 6$
Area = 48 sq. units

4. **Work for #4 is below the picture**

$r = 2$
 $h = 4$
 $b = 4$

≈ 22.28 sq. units

Work for #4

A) Area of the HALF of a circle:

$A = \frac{\pi r^2}{2}$
 $A = \frac{(3.14) \cdot (2)^2}{2}$
 $A = \frac{(3.14) \cdot 4}{2}$
 $A = \frac{12.56}{2} = 6.28 u^2$

B) Area of Square = $l \cdot w$
 $A = 4 \cdot 4 = 16 u^2$
 In sum: Add area to half circle + square
 $A = 6.28 u^2 + 16 u^2 = 22.28 u^2$

Trapezoid

Area of a trapezoid = $\frac{1}{2} \times (\text{base 1} + \text{base 2}) \times \text{height}$

5. #5 work to the right

$b_1 = 10$
 $b_2 = 7$
 $h = 8$

Area = 68 sq. units

$A = \frac{1}{2}(b_1 + b_2)h$
 $A = \frac{1}{2}(7 + 10)8$
 $A = \frac{1}{2}(17)8$
 $A = \frac{1}{2} \cdot 136$
 $A = 68 u^2$