

NOTES 11.1 & 11.2 COMPOSITE FIGURES

EXAMPLES: Find the shaded area.

1. $A = Lw = 5(3) = 30$
 $ALW = 15(28) = 420$
ADD
 $30 + 420 = 450$
 $A = 450 \text{ yd}^2$

2. $A_T = \frac{4(14)}{2} = \frac{24}{2} = 12$
 $A_R = 9(10) = 90$
ADD
 $90 + 12 = 102$
 $A = 102 \text{ mm}^2$

3. $A_S = 16^2 = 256$
 $A_C = \frac{\pi r^2}{2} = \frac{\pi(8)^2}{2} = \frac{64\pi}{2} = 32\pi$
 only half circle
ADD
 $256 + 32\pi$
 $A = 256 + 32\pi \text{ ft}^2$
 Not like terms
 keep

4. $A = 3(8) = 24$
 $A = 6(2) = 12$
ADD
 $24 + 12 = 36$
 $A = 36 \text{ m}^2$

5. $A_r = 22(18) = 396$
 $A_T = \frac{9(22)}{2} = 99$
Subtract: only want shaded!
 $396 - 99 = 297$
 $A = 297 \text{ mm}^2$

6. $A_r = 9(5) = 45$
 $A_c = \frac{\pi(2.5)^2}{2} = \frac{6.25\pi}{2} = 3.125\pi$
 only half circle
Subtract!
 $45 - 3.125\pi$
 $A = 45 - 3.125\pi \text{ cm}^2$
 LEAVE