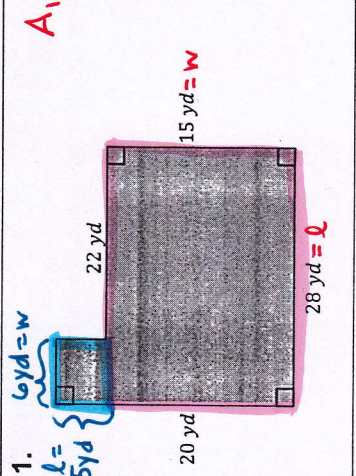


NOTES 11.1 & 11.2 COMPOSITE FIGURES

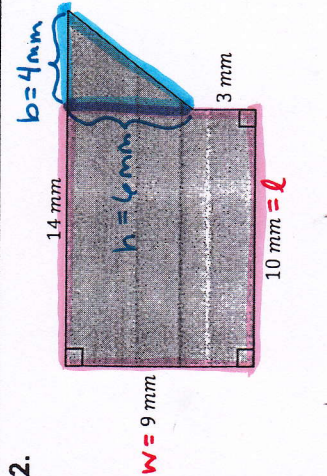
EXAMPLES: Find the shaded area.

1. 

$$A_1 = lw = 28(15) = 420$$

$$A_2 = lw = 5(6) = 30$$

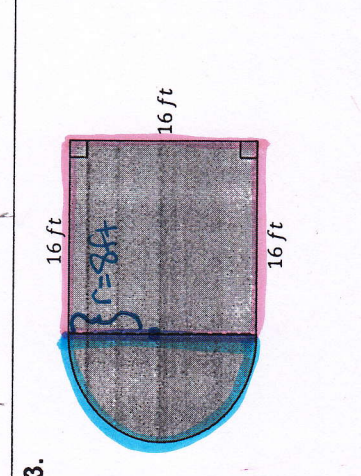
$$A = A_1 + A_2 = 420 + 30 = 450 \text{ yd}^2$$

2. 

$$A_1 = lw = 10(9) = 90$$

$$A_2 = \frac{1}{2}bh = \frac{1}{2}(4)(6) = 12$$

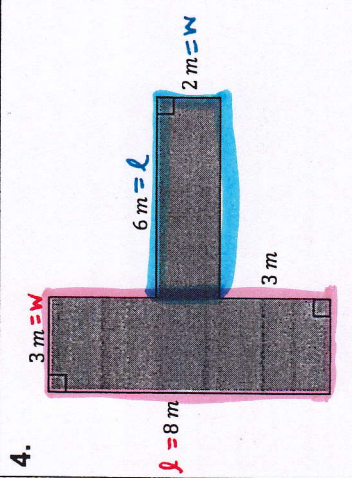
$$A = A_1 + A_2 = 90 + 12 = 102 \text{ mm}^2$$

3. 

$$A_1 = s^2 = (16)^2 = 256$$

$$A_2 = \frac{1}{2}\pi r^2 = \frac{1}{2}\pi(8)^2 = \frac{1}{2}\pi(64) = 32\pi$$

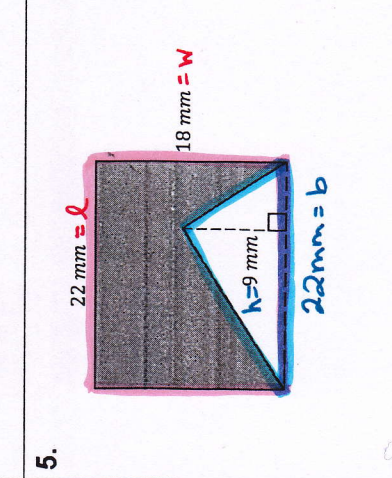
$$A = A_1 + A_2 = 256 + 32\pi \text{ ft}^2$$

4. 

$$A_1 = lw = 8(3) = 24$$

$$A_2 = lw = 6(2) = 12$$

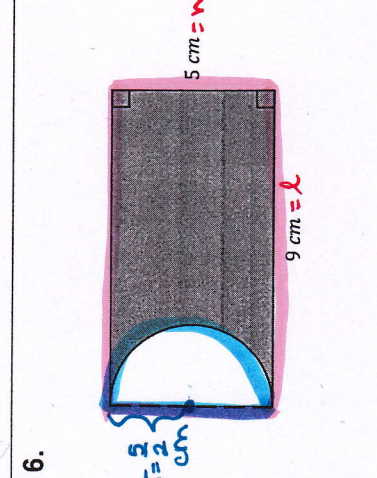
$$A = A_1 + A_2 = 24 + 12 = 36 \text{ m}^2$$

5. 

$$A_1 = lw = 22(18) = 396$$

$$A_2 = \frac{1}{2}bh = \frac{1}{2}(22)(9) = 99$$

$$A = A_1 - A_2 = 396 - 99 = 297 \text{ mm}^2$$

6. 

$$A_1 = lw = 9(5) = 45$$

$$A_2 = \frac{1}{2}\pi r^2 = \frac{1}{2}\pi\left(\frac{5}{2}\right)^2 = \frac{1}{2}\pi\left(\frac{25}{4}\right) = \frac{25}{8}\pi$$

$$A = A_1 - A_2 = 45 - \frac{25}{8}\pi \text{ cm}^2$$