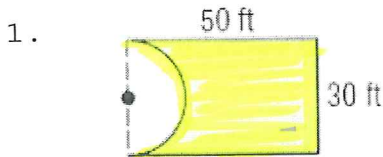


Name: _____

Date: _____

Area of Composites Notes

Find the area of the shaded regions.



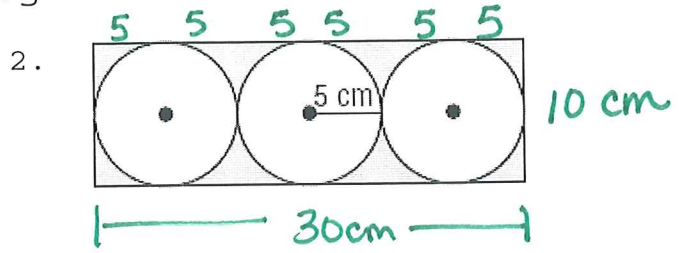
Area of rectangle:

$$A = (50)(30) = 1500 \text{ ft}^2$$

Area of semicircle:

$$\begin{aligned} \frac{1}{2} \pi r^2 &= \frac{1}{2} \pi (15)^2 \\ &= 112.5 \pi \text{ ft}^2 \end{aligned}$$

$$A = 1500 - 112.5 \pi \text{ ft}^2$$



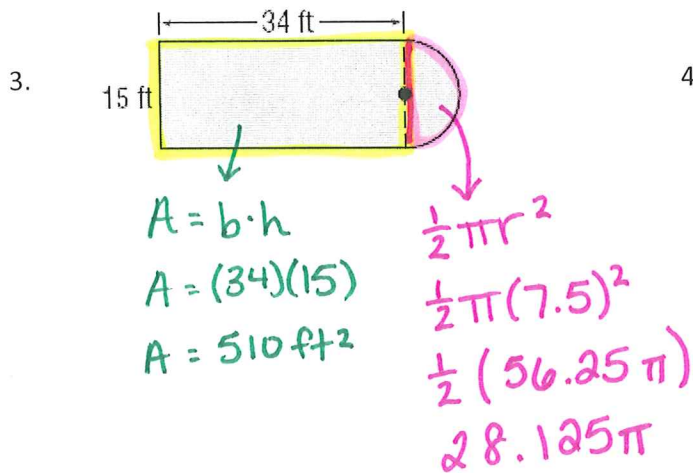
Area of rectangle:

$$A = (30)(10) = 300 \text{ cm}^2$$

Area of 3 circles:

$$\begin{aligned} 3 \pi r^2 &= 3 \pi (5)^2 \\ &= 75 \pi \text{ cm}^2 \end{aligned}$$

$$A = 300 - 75 \pi \text{ cm}^2$$



$$A = b \cdot h$$

$$A = (34)(15)$$

$$A = 510 \text{ ft}^2$$

$$\frac{1}{2} \pi r^2$$

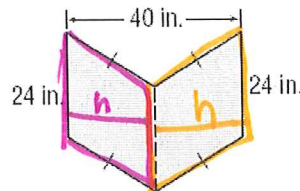
$$\frac{1}{2} \pi (7.5)^2$$

$$\frac{1}{2} (56.25 \pi)$$

$$28.125 \pi$$

$$A = 510 + 28.125 \pi \text{ ft}^2$$

4.



$$A = b \cdot h$$

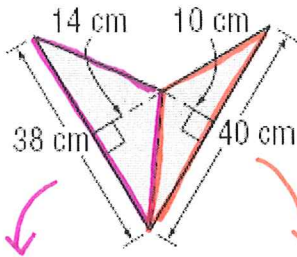
$$= (24)(20)$$

$$= 480 \text{ in}^2$$

$$A = 480 + 480$$

$$A = 960 \text{ in}^2$$

5.



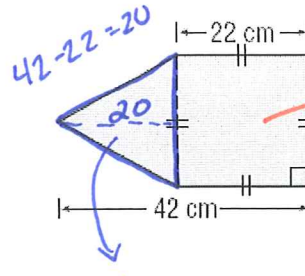
$$\frac{1}{2}(38)(14) = 266 \text{ cm}^2$$

$$\frac{1}{2}(40)(10) = 200 \text{ cm}^2$$

$$A = 266 + 200$$

$$A = 466 \text{ cm}^2$$

6.



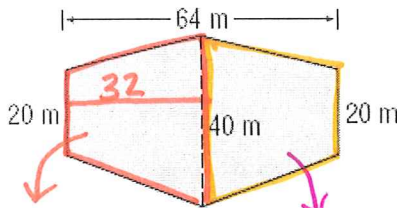
$$\frac{1}{2}(22)(20) = 220 \text{ cm}^2$$

$$A = b \cdot h = (22)(22) = 484 \text{ cm}^2$$

$$A = 220 + 484$$

$$A = 704 \text{ cm}^2$$

7.



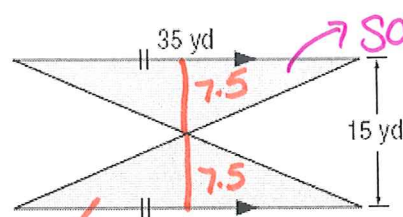
$$\frac{1}{2} \cdot h \cdot (b_1 + b_2) = \frac{1}{2}(32)(20 + 40) = 960 \text{ m}^2$$

same measurements
 $A = 960 \text{ m}^2$

$$A = 960 + 960$$

$$A = 1920 \text{ m}^2$$

8.



$$A = \frac{1}{2}(7.5)(35) = 131.25 \text{ yd}^2$$

same measurements
 $A = 131.25 \text{ yd}^2$

$$A = 131.25 + 131.25$$

$$A = 262.5 \text{ yd}^2$$