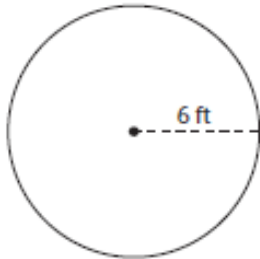


Section 3.1 – Practice Problems

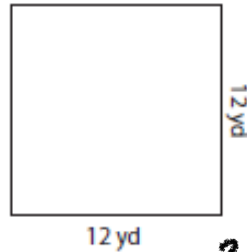
Find the area of each figure.

1)



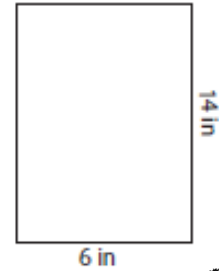
$$\text{Area} = \underline{113.1 \text{ ft}^2}$$

2)



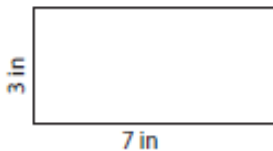
$$\text{Area} = \underline{144 \text{ yd}^2}$$

3)



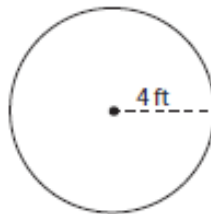
$$\text{Area} = \underline{84 \text{ in}^2}$$

4)



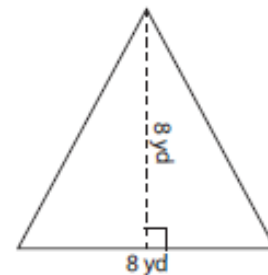
$$\text{Area} = \underline{21 \text{ in}^2}$$

5)



$$\text{Area} = \underline{50.3 \text{ ft}^2}$$

6)



$$\text{Area} = \underline{32 \text{ yd}^2}$$

$$1) A = \pi r^2 \rightarrow \pi(6)^2 = 36\pi = 113.1 \text{ ft}^2$$

$$2) A = l \cdot w \rightarrow 12 \cdot 12 = 144 \text{ yd}^2$$

$$3) A = l \cdot w \rightarrow 14 \cdot 6 = 84 \text{ in}^2$$

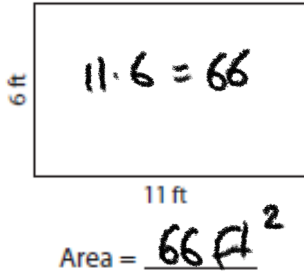
$$4) A = l \cdot w \rightarrow 7 \cdot 3 = 21 \text{ in}^2$$

$$5) A = \pi r^2 \rightarrow \pi(4)^2 = 16\pi = 50.3 \text{ ft}^2$$

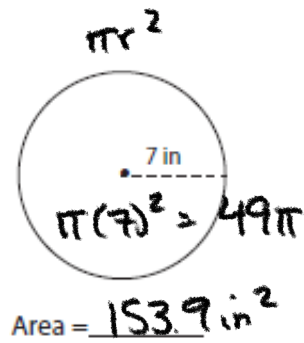
$$6) A = \frac{1}{2} b \cdot h \rightarrow \frac{1}{2} \cdot 8 \cdot 8 = \frac{64}{2} = 32 \text{ yd}^2$$

Find the area of each figure.

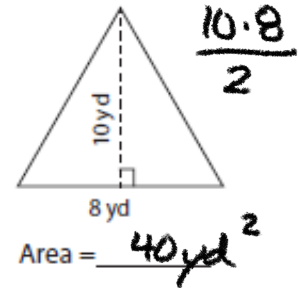
7)



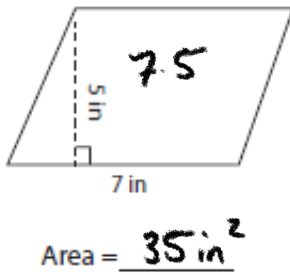
8)



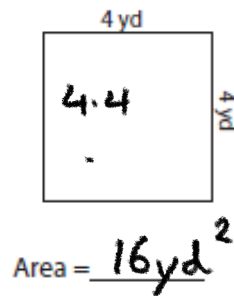
9)



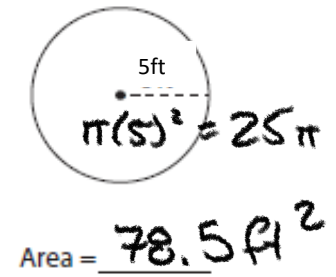
10)



11)

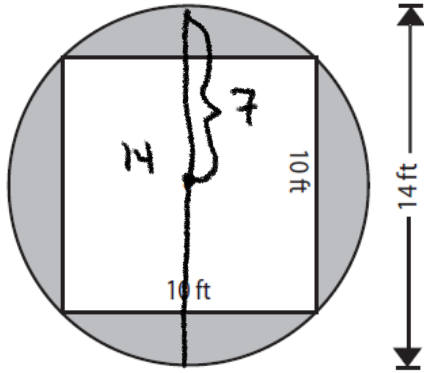


12)



Find the Area of the Shaded Portion of the following figures.

13)



Area = _____

Area of Circle

$$\pi r^2$$

$$\pi(7)^2 = 49\pi = 153.94$$

Area of Square

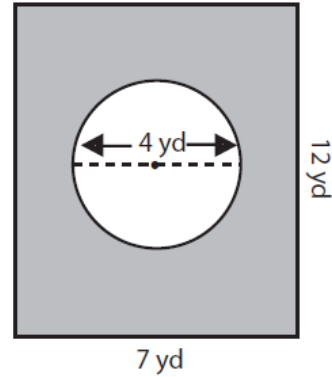
$$10 \cdot 10 = 100$$

Area of Shaded
circle - square

$$153.94 - 100$$

$$\boxed{53.94 \text{ ft}^2}$$

14)



Area = _____

Area of Rectangle

$$7 \cdot 12 = 84 \text{ yd}^2$$

Area of Circle

$$\pi(2)^2 = 4\pi = 12.57$$

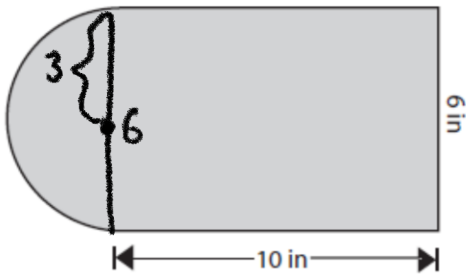
Area of Shaded

$$84 - 12.57$$

$$\boxed{71.43 \text{ yd}^2}$$

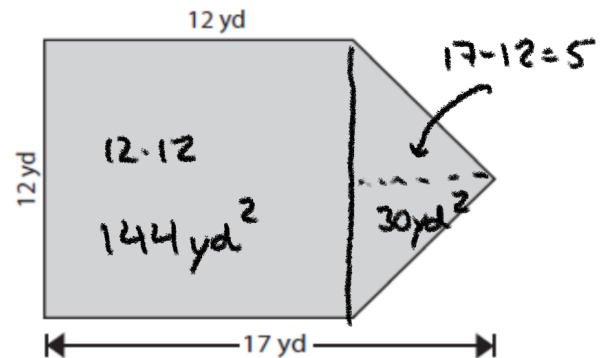
Find the area of each figure. Round the answer to 2 decimal places if necessary.

15)



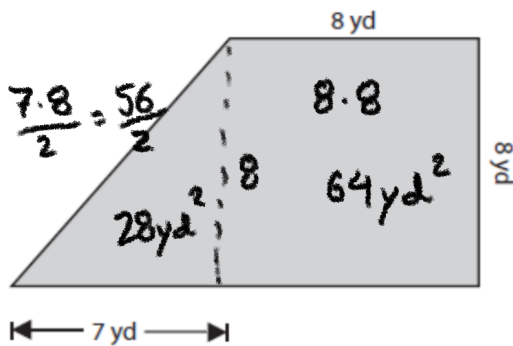
Area = 74.1 in²

16)



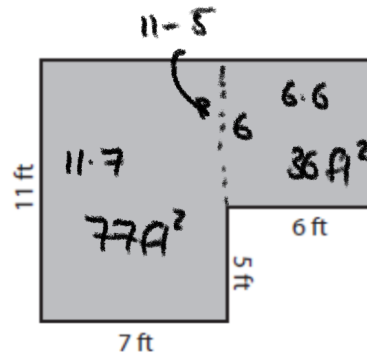
Area = 174 yd²

17)



Area = 92 yd²

18)



Area = 113 ft²

15. Rectangle: $6 \cdot 10 = 60$

Half circle: $\frac{\pi r^2}{2} = \frac{\pi(3)^2}{2} = \frac{9\pi}{2} = 14.1$

16. Δ is $\frac{5 \cdot 12}{2} = 30$

Total: 74.1 in²

