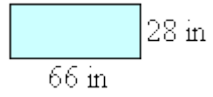
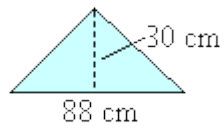


Review Exercise Set 39

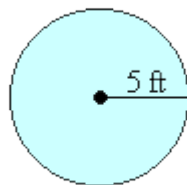
Exercise 1: Find the area of the given figure below.



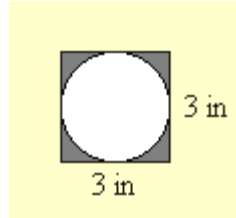
Exercise 2: Find the area of the given figure below.



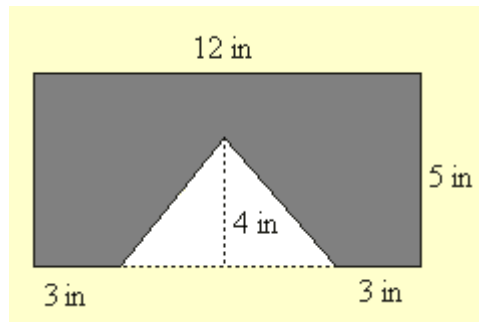
Exercise 3: Find the area of the given figure below.



Exercise 4: Find the area of the shaded portion of the given figure below.

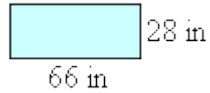


Exercise 5: Find the area of the shaded portion of the given figure below.



Review Exercise Set 39 Answer Key

Exercise 1: Find the area of the given figure below.



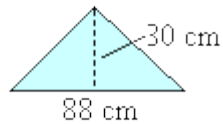
The area of a rectangle is the product of its length and width.

$$A = l * w$$

$$A = 66 \text{ in} * 28 \text{ in}$$

$$\mathbf{A = 1848 \text{ in}^2}$$

Exercise 2: Find the area of the given figure below.



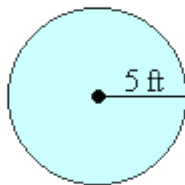
The area for a triangle is one-half of its base times the height.

$$A = \frac{1}{2} bh$$

$$A = \frac{1}{2} (88 \text{ cm})(30 \text{ cm})$$

$$\mathbf{A = 1320 \text{ cm}^2}$$

Exercise 3: Find the area of the given figure below.



The area of a circle is equal to pi times the radius squared.

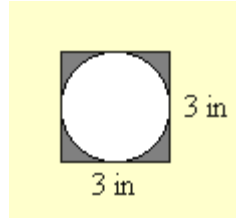
$$A = \pi r^2$$

$$A \approx (3.14)(5 \text{ ft})^2$$

$$A \approx (3.14)(25 \text{ ft}^2)$$

$$\mathbf{A \approx 78.5 \text{ ft}^2}$$

Exercise 4: Find the area of the shaded portion of the given figure below.



In the given figure, we have a circle enclosed within a square. The shaded portion of the figure is the area within the square but outside of the circle. Therefore, in order to find the area of the shaded portion we must find the area of the outer square and subtract the area of the inner circle.

$A = \text{area of square} - \text{area of circle}$

$$A = s^2 - \pi r^2$$

The length of the sides of the square are 3 inches, which is also the diameter of the circle. The radius of the circle would be half of the diameter or 1.5 inches.

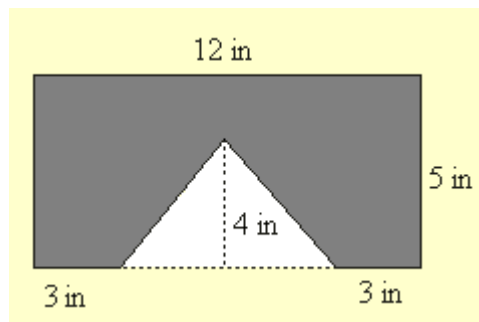
$$A \approx (3 \text{ in})^2 - (3.14)(1.5 \text{ in})^2$$

$$A \approx 9 \text{ in}^2 - (3.14)(1.5 \text{ in})^2$$

$$A \approx 9 \text{ in}^2 - 7.065 \text{ in}^2$$

$$A \approx \mathbf{1.935 \text{ in}^2}$$

Exercise 5: Find the area of the shaded portion of the given figure below.



In the given figure, we have a triangle that is inside the rectangle and is centered on the base of the rectangle. The shaded portion of the figure is the area within the rectangle but outside of the triangle. So, we must find the area of the rectangle and subtract the area of the triangle.

$A = \text{area of rectangle} - \text{area of triangle}$

$$A = lw - \frac{1}{2}bh$$

Exercise 5 (Continued):

The length of the rectangle is 12 inches and the base of the triangle is centered on the base with 3 inches on both sides of triangle. So the base of the triangle would be equal to the length of the rectangle minus the 3 inches on each side.

$$b = 12 \text{ inches} - 3 \text{ inches} - 3 \text{ inches}$$

$$b = 6 \text{ inches}$$

Now, we can substitute in all of the known values.

$$A = lw - \frac{1}{2}bh$$

$$A = (12 \text{ in})(5 \text{ in}) - \frac{1}{2}(6 \text{ in})(4 \text{ in})$$

$$A = 60 \text{ in}^2 - 12 \text{ in}^2$$

$$\mathbf{A = 48 \text{ in}^2}$$