8.3 Area of Composite Figures

I will find the area of composite figures.

How can you tell if the answer is exact or approximate?

Example #1

\[
\begin{align*}
A &= \frac{10\text{ft}^2}{2} \\
\pi (0.75)^2 &= \frac{\pi (0.5\text{ft})^2}{2} \\
2 \times 1.5 &= 3\text{ft}^2 = 1.716828 \\
2 \times 1.5 &= 3\text{ft}^2 \\
3\text{ft}^2 + 0.88\text{ft}^2 &= 3.88\text{ft}^2 \\
A &= 3.88\text{ft}^3
\end{align*}
\]

Ex #2

A triangle is cut from a rectangle. Find the area of the shaded region.

\[
\begin{align*}
A &= \frac{1}{2} (4)(6) = 12\text{ft}^2 \\
A &= \frac{1}{2} (6\text{ft}^2 - 12\text{ft}^2 = 54\text{ft}^2)
\end{align*}
\]

A = 54 ft^2