

Area of a Circle $A = \pi r^2$

Area of a Rectangle $A = bh$
 $A = lw$



Area of Triangle $A = \frac{1}{2}bh$
 $A = \frac{bh}{2}$

Area of a Trapezoid $A = \frac{h(b_1 + b_2)}{2}$
 $A = \frac{1}{2}h(b_1 + b_2)$

Circumference of a Circle $C = 2\pi r$
 $C = \pi d$

Perimeter of a Rectangle $P = 2l + 2w$
 $P = 2(l + w)$

* Area of a Square $A = s^2$



* Perimeter of a Square $P = 4s$

Pythagorean Theorem $a^2 + b^2 = c^2$

Pythagorean Theorem

$$a^2 + b^2 = c^2 \quad \text{Right } \Delta$$

$$c^2 = a^2 + b^2 \quad \text{Right } \Delta$$

$$\begin{aligned} c^2 > a^2 + b^2 & \quad \text{Obtuse } \Delta \\ \text{or} \quad a^2 + b^2 < c^2 & \end{aligned}$$

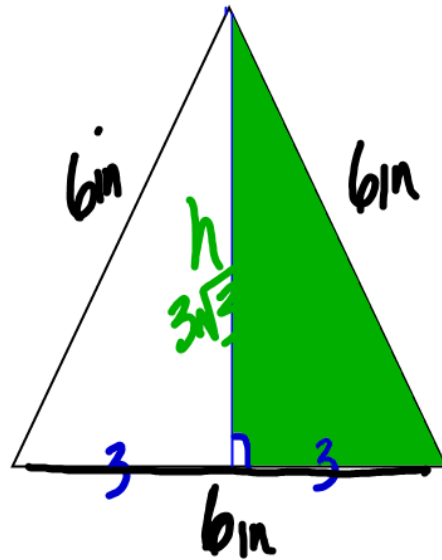
$$\begin{aligned} c^2 < a^2 + b^2 & \quad \text{Acute } \Delta \\ \text{or} \quad a^2 + b^2 > c^2 & \end{aligned}$$

4, 6, 8

$$8^2 \quad \underline{\quad} \quad 4^2 + 6^2$$

$$64 \quad \underline{\quad} \quad 16 + 36$$

$$64 \quad \underline{>} \quad 52 \quad \text{Obtuse}$$



Area of Δ

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

$$3^2 + b^2 = 6^2$$

$$9 + b^2 = 36$$

$$\sqrt{b^2} = \sqrt{27}$$

$$b = \sqrt{9 \cdot 3}$$

$$b = 3\sqrt{3}$$

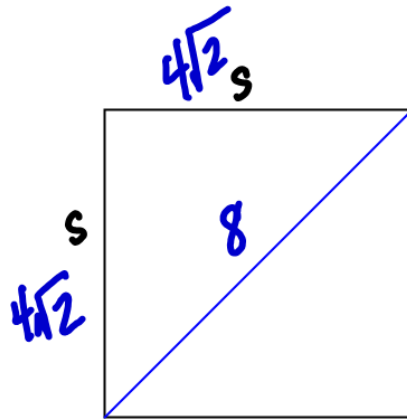
$$A = \frac{1}{2}bh$$

$$A = \frac{1}{2}(6)(3\sqrt{3})$$

$$A = 3(3\sqrt{3})$$

$$A = 9\sqrt{3} \text{ in}^2$$

$$\frac{3\sqrt{3} \cdot 3\sqrt{3}}{9\sqrt{6}}$$



$$s^2 + s^2 = 8^2$$

$$2s^2 = 64$$

$$\sqrt{s^2} = \sqrt{32}$$

$$s = \sqrt{16 \cdot 2}$$

$$s = 4\sqrt{2}$$

$$\begin{array}{l} 1 \cdot 32 \\ 2 \cdot 16 \\ 4 \cdot 8 \\ 8 \cdot 4 \end{array}$$

Area of Square

$$A = s^2$$

$$A = (4\sqrt{2})^2$$

$$A = (4\sqrt{2})(4\sqrt{2})$$

$$A = 16\sqrt{4}$$

$$A = 32 \text{ units}^2$$

p 327

18 - 30 All

Quiz on Formulas