

$$a^2 + a^2 = 10^2$$

$$2a^2 = 100$$

$$\sqrt{a^2} = \sqrt{50} \quad 25.2$$

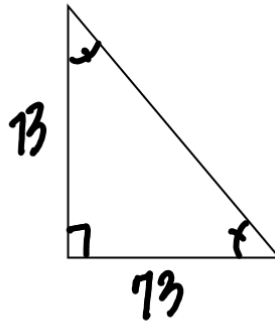
$$a = \sqrt{25 \cdot 2}$$

$$a = 5\sqrt{2}$$

$$\frac{10\sqrt{2}}{2}$$

$$5\sqrt{2}$$

22.

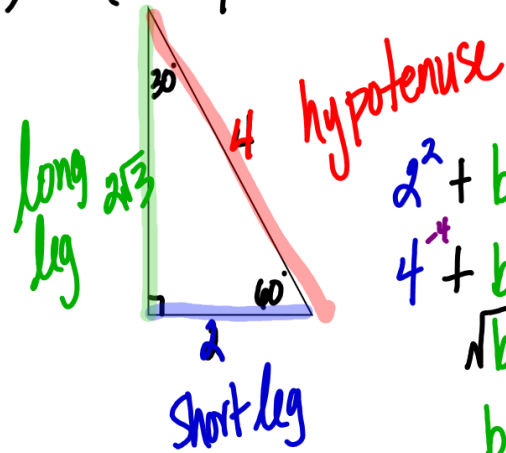


$$A = \frac{1}{2}bh$$

$$A = \frac{1}{2}(13)(13)$$

$$A = \cdot$$

30-60-90  $\Delta$



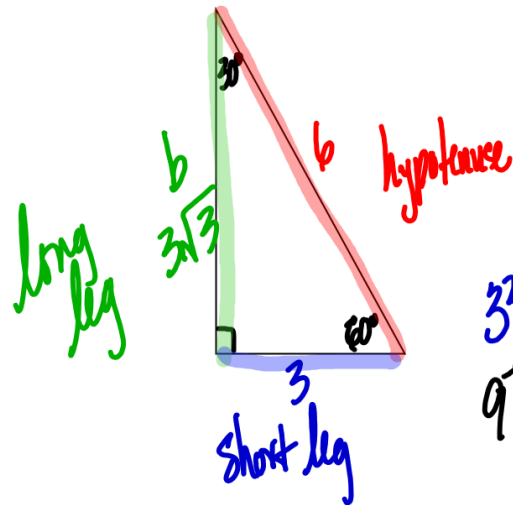
$$a^2 + b^2 = 4^2$$

$$4^2 + b^2 = 16$$

$$\sqrt{b^2} = \sqrt{16 - 4}$$

$$b = \sqrt{4 \cdot 3}$$

$$b = 2\sqrt{3}$$



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

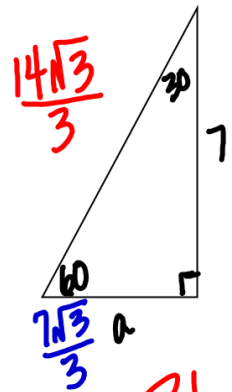
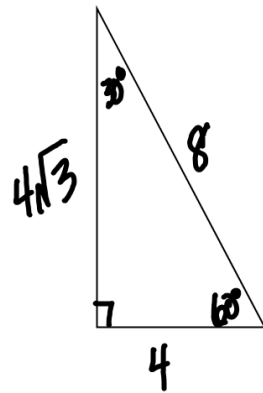
$$9 + b^2 = 36$$

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

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

long leg = short leg  $\sqrt{3}$

hypotenuse =  $2 \cdot$  short leg



long leg = short leg  $\sqrt{3}$

$$\frac{7}{\sqrt{3}} = a \frac{\sqrt{3}}{\sqrt{3}}$$

$$\frac{7}{\sqrt{3}} = a$$

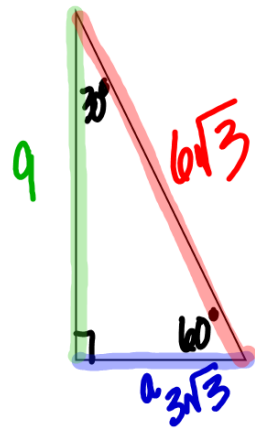
$$\frac{7}{\sqrt{3}} \cdot \frac{\sqrt{3}}{\sqrt{3}} = a$$

$$\frac{7\sqrt{3}}{3} = a$$

Rationalize  
the denominator  
 $\sqrt{3} \cdot \sqrt{3}$   
 $\sqrt{9}$  (3)

$$\frac{7\sqrt{3}}{3} \cdot \frac{2}{1}$$

$$\frac{14\sqrt{3}}{3}$$



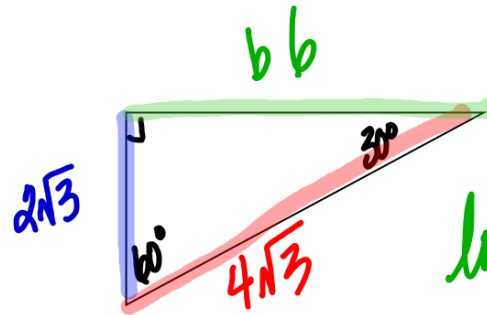
long leg = short leg  $\sqrt{3}$

$$9 = \frac{a\sqrt{3}}{\sqrt{3}}$$

Rationalize  $\frac{\sqrt{3}}{\sqrt{3}} \cdot \frac{9}{\sqrt{3}} = a$

$$\frac{3\sqrt{3}}{\sqrt{3}} = a$$

$$3\sqrt{3} = a$$



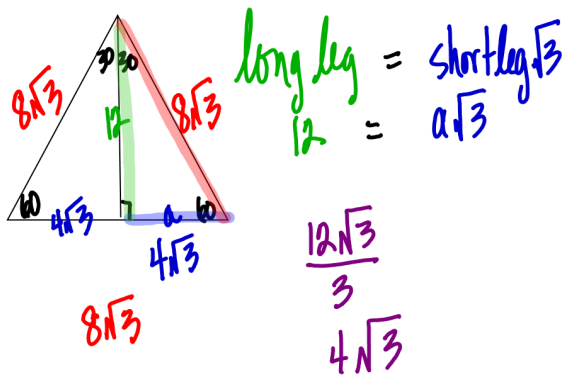
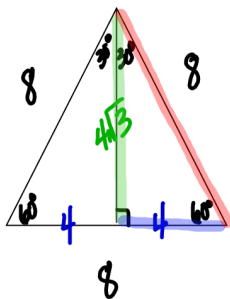
long leg = short leg  $\sqrt{3}$

$$b = 2\sqrt{3} \cdot \sqrt{3}$$

$$b = 2\sqrt{9}$$

$$b = 2(3)$$

$$b = 6$$



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

$$A = \frac{1}{2}(8\sqrt{3})(12)$$

$$A = 4\sqrt{3}(12)$$

$$A = 48\sqrt{3} \text{ units}^2$$

$$A \approx 83.14 \text{ units}^2$$

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10-13 A

18-21 A

23, 24, 26, 27