

## Square Roots

1. Find the value of each expression.

a)  $\sqrt{16} - \sqrt{4}$

b)  $3\sqrt{25} + 4\sqrt{16}$

c)  $\sqrt{\frac{1}{4}} + \sqrt{\frac{1}{9}}$

d)  $9 \div \sqrt{9} - 9$

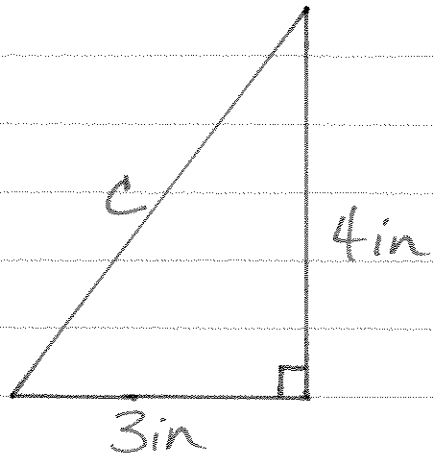
e)  $\sqrt{25-16} + \sqrt{4+5}$

f)  $\sqrt{16-7} + 7$

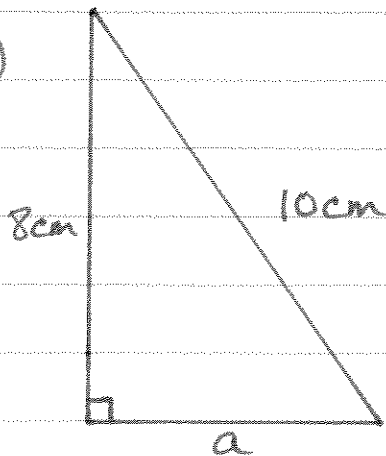
2. Find the missing side length.

Note:  $c^2 = a^2 + b^2$

a)



b)



## Square Roots

1. Find the value of each expression.

a)  $\sqrt{16} - \sqrt{4}$

$$4 - 2$$

$$\boxed{2}$$

b)  $3\sqrt{25} + 4\sqrt{16}$

$$3 \cdot 5 + 4 \cdot 4$$

$$15 + 16$$

$$\boxed{31}$$

c)  $\sqrt{\frac{1}{4}} + \sqrt{\frac{1}{9}}$

$$\frac{1}{2} + \frac{1}{3} \quad \text{LCD} = 6$$

$$\frac{1}{2} \left( \frac{3}{3} \right) + \frac{1}{3} \left( \frac{2}{2} \right)$$

$$\frac{3}{6} + \frac{2}{6}$$

$$\boxed{\frac{5}{6}}$$

d)  $9 \div \sqrt{9} - 9$

$$9 \div 3 - 9$$

$$3 - 9$$

$$\boxed{-6}$$

e)  $\sqrt{25-16} + \sqrt{4+5}$

$$\sqrt{9} + \sqrt{9}$$

$$3 + 3$$

$$\boxed{6}$$

f)  $\sqrt{16-7} + 7$

$$\sqrt{9} + 7$$

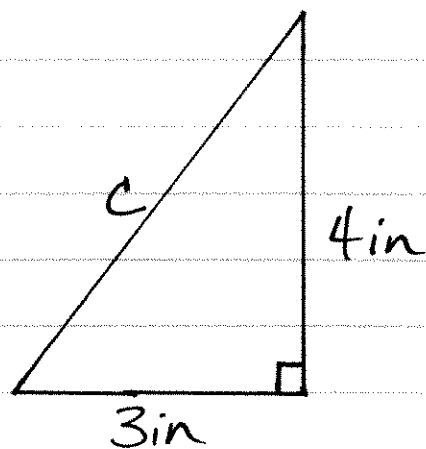
$$3 + 7$$

$$\boxed{10}$$

2. Find the missing side length.

Note:  $c^2 = a^2 + b^2$

a)



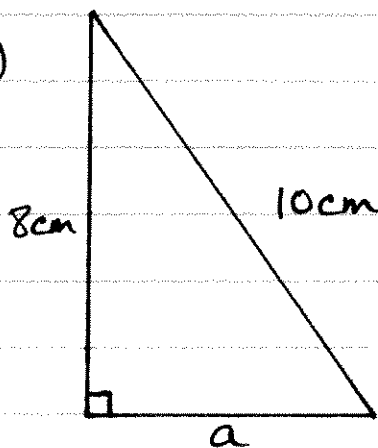
$$c^2 = 3^2 + 4^2$$

$$c^2 = 9 + 16$$

$$c^2 = 25$$

$$c = 5 \text{ in}$$

b)



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

$$10^2 = a^2 + 8^2$$

$$100 = a^2 + 64$$

$$\begin{array}{r} 100 = a^2 + 64 \\ -64 \quad \quad -64 \\ \hline \end{array}$$

$$36 = a^2$$

$$6 = a$$

$$a = 6 \text{ cm}$$