

### 3C Review: Get Ready for Trig

Part A: Solving Equations



Solve:

a)  $x^2 = 3^2 + 4^2$   
 $x^2 = 9 + 16$   
 $x^2 = 25$   
 $\sqrt{x^2} = \sqrt{25}$   
 $x = 5$

b)  $5^2 + x^2 = 17^2$   
 $x^2 = 17^2 - 5^2$   
 $x^2 = 289 - 25$   
 $x^2 = 264$   
 $x = \sqrt{264}$   
 $\approx 16.2$

Part B: Rounding

Round to two decimal places.

a)  $5.6781$   
 $\approx 5.68$

b)  $3.2847$   
 $\approx 3.28$

c)  $7.4986$   
 $\approx 7.50$

d)  $\sqrt{524}$   
 $\approx 22.891$   
 $\approx 22.89$

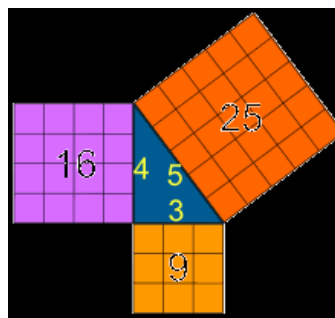


Part C The Pythagorean Theorem

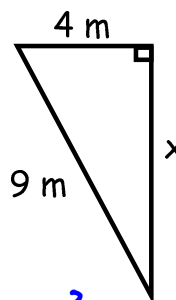
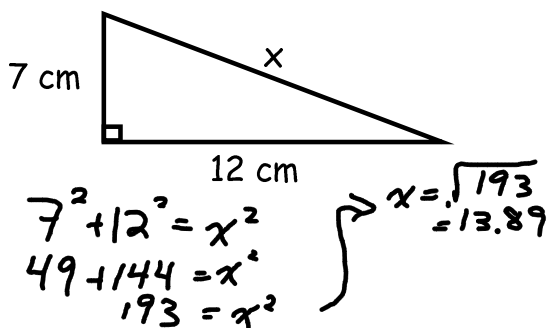
$$a^2 + b^2 = c^2$$

hypotenuse

- longest side
- across from right angle



Find the value of x. Round to 2 decimal places.

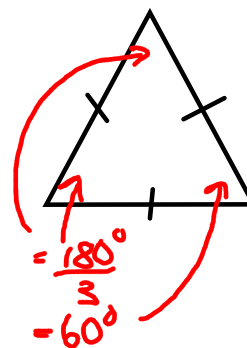
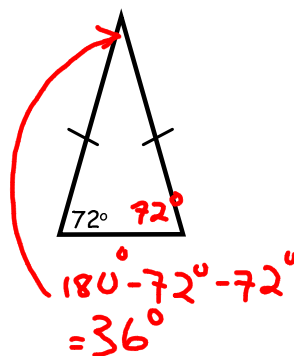
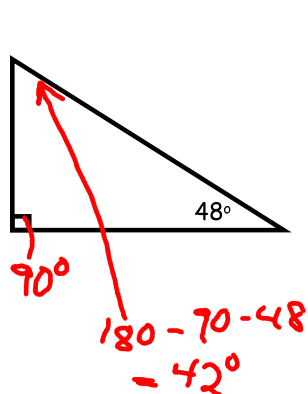


$9^2 = 4^2 + x^2$   
 $x^2 = 9^2 - 4^2$   
 $= 81 - 16$   
 $= 65$   
 $x = \sqrt{65}$   
 $= 8.06$

Part D Angles in a Triangle

Find the measure of all the angles.

180° in any TRIANGLE



Part E Ratios and Proportions

1. Write each ratio in lowest terms.

just like putting a fraction in lowest terms

find a # that divides evenly into  
each part of the ratio



$$15:35 \\ = 3:7$$

$$3:12 \\ = 1:4$$

$$\frac{6}{14} \\ = \frac{3}{7}$$

2. Solve for x.

a)  $\frac{x}{7} = \frac{15}{21}$

$$x = \frac{7 \cdot 15}{21} \\ = 5$$

b)  $\frac{2}{5} = \frac{3}{x}$

$$2x = 5(3) \\ 2x = 15 \\ x = \frac{15}{2}$$

c)  $12 = \frac{36}{x}$

$$12x = 36 \\ x = \frac{36}{12} \\ = 3$$

d)  $\frac{x}{12} = \frac{y}{24} = \frac{6}{9}$

$$\frac{x}{12} = \frac{6}{9}$$

$$x = \frac{12 \cdot 6}{9} \\ = 8$$

$$\frac{y}{24} = \frac{6}{9}$$

$$y = \frac{24 \cdot 6}{9} \\ = 16$$

Homework  
page 4-5  
#1- 4, 6, 8-10

