

IN CLASS REVIEW 8.3-8.6

Rev Chapt 8 Mid Chapt Test (wk p51)  
Rev 8.4

SOH CAH TOA

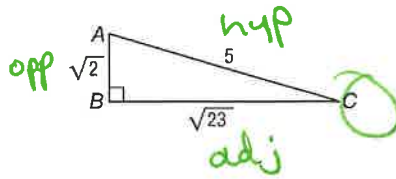
3. Find  $\sin C$ .

A  $\sqrt{2}$

**B  $\frac{\sqrt{2}}{5}$**

C  $\frac{\sqrt{23}}{\sqrt{2}}$

D  $\frac{\sqrt{23}}{5}$



$\sin C = \frac{\text{opp}}{\text{hyp}}$

$\sin C = \frac{\sqrt{2}}{5}$

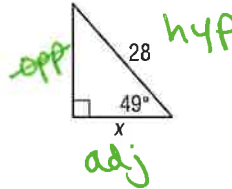
4. Find  $x$  to the nearest tenth.

F 14

G 21.1

**H 18.4**

J 32.2



$\cos 49^\circ = \frac{x}{28}$

$x = 28 \cos 49^\circ$   
 $x \approx 18.36965$   
 $x \approx 18.4$

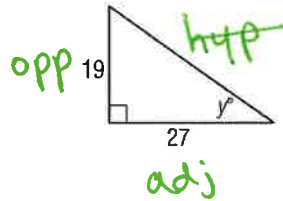
5. Find  $y$  to the nearest degree.

A 145

**B 60**

C 45

**D 35**



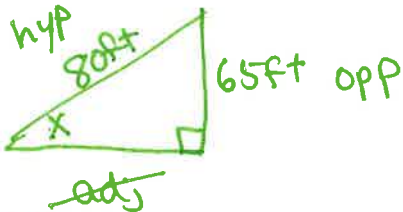
$\tan y = \frac{19}{27}$

$y = \tan^{-1}(19/27)$

$y \approx 35.134 \dots$

$y \approx 35^\circ$

10. Guy wires 80 feet long support a 65-foot tall telephone pole. To the nearest degree, what angle will the wires make with the ground?



$\sin x = \frac{65}{80}$

$x = \sin^{-1}(65/80)$

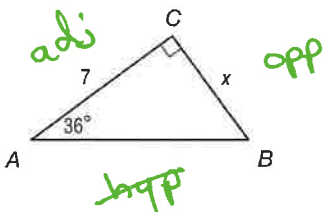
$x \approx 54.3409$

**$x \approx 54^\circ$**

Rev 8.6 (wk p26)

Find  $x$ . Round to the nearest hundredth if necessary.

9.

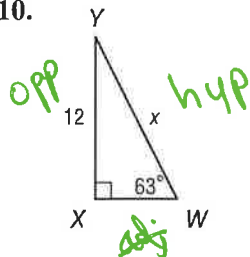


$\tan 36^\circ = \frac{x}{7}$

$x = 7 \tan 36^\circ$   
 $x \approx 5.085797 \dots$

**$x \approx 5.09$**

10.



$\frac{\sin 63^\circ}{1} = \frac{12}{x}$

$x \sin 63^\circ = 12$   
 $\frac{x \sin 63^\circ}{\sin 63^\circ} = \frac{12}{\sin 63^\circ}$

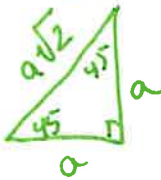
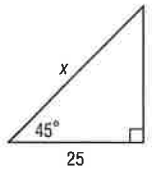
$x = \frac{12}{\sin 63^\circ}$   
 $x \approx 13.4679 \dots$

**$x \approx 13.47$**

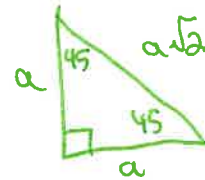
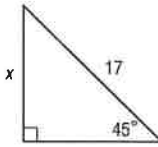
*Jones*  
Give Exact Ans

Rev 8.3 (wk p20)  
Find x.

1.



2.



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

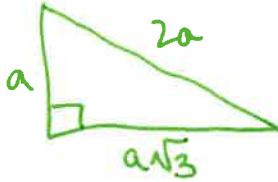
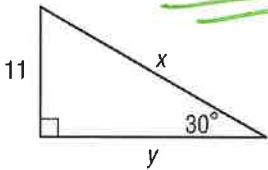
$\frac{a\sqrt{2}}{\sqrt{2}} = \frac{17}{\sqrt{2}}$   
 $a = \frac{17}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}}$   
 $a = \frac{17\sqrt{2}}{2}$

$x = a$   
 $x = \frac{17\sqrt{2}}{2}$

Find x and y.

Exact Ans

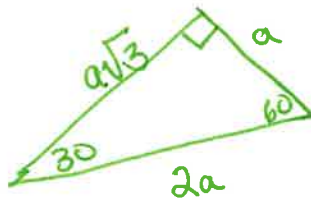
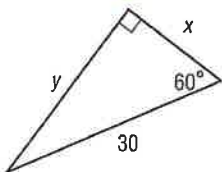
9.



$a = 11$      $x = 2a$   
 $x = 2 \cdot 11$   
 $x = 22$

$y = a\sqrt{3}$   
 $y = 11\sqrt{3}$

12.



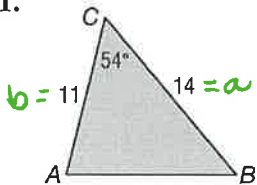
$\frac{2a}{2} = \frac{30}{2}$   
 $a = 15$   
 $x = a$   
 $x = 15$

$y = a\sqrt{3}$   
 $y = 15\sqrt{3}$

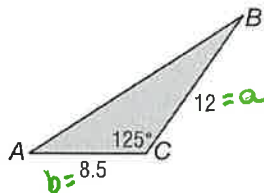
Rev 8.6 (wk p36)

Find the area of  $\triangle ABC$  to the nearest tenth.

1.



2.



$Area = \frac{1}{2} absinC$   
 $= \frac{1}{2} (12)(8.5) sin125^\circ$   
 $\approx 41.776754...$

$Area = \frac{1}{2} ab sin C$   
 $= \frac{1}{2} (14)(11) sin 54^\circ$

Chapter 3  $\approx 62.2943...$

$Area \approx 62.3 units^2$

$Area \approx 41.8 units^2$