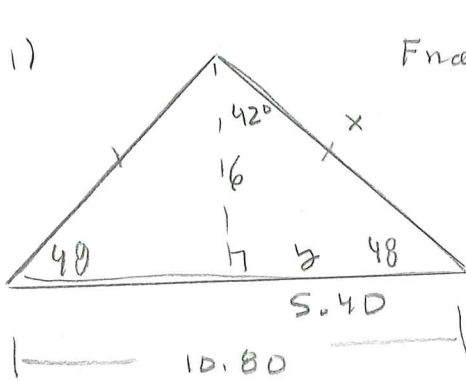


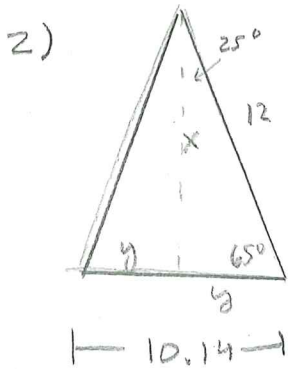
# HW #6: Handout



Find  $x$ :  $\sin(48^\circ) = \frac{6}{x}$   
 $x \sin(48^\circ) = 6$   
 $x = \frac{6}{\sin(48^\circ)}$   
 $x = 8.07$

Find  $y$ :  
 $\tan(48^\circ) = \frac{6}{y}$   
 $y \tan(48^\circ) = 6$   
 $y = \frac{6}{\tan(48^\circ)}$   
 $y = 5.40$

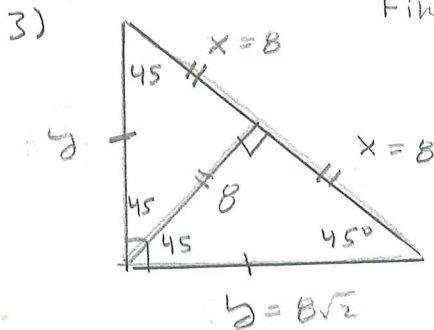
Area:  
 $\frac{1}{2}(10.80)(6)$   
 $A = 32.40$   
 Perim:  
 $10.80 + 8.07 + 8.07$   
 $P = 26.94$



Find  $x$ :  $\sin(65^\circ) = \frac{x}{12}$   
 $x = 12 \sin(65^\circ)$   
 $x = 10.88$

Find  $y$ :  
 $\cos(65^\circ) = \frac{y}{12}$   
 $y = 12 \cos(65^\circ)$   
 $y = 5.07$

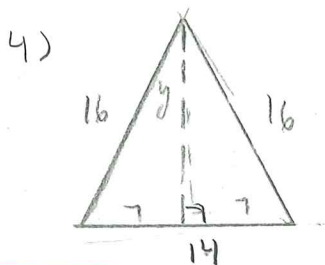
Area:  
 $\frac{1}{2}(10.14)(12)$   
 $A = 55.16 \text{ cm}^2$   
 Perim:  
 $12 + 12 + 10.14$   
 $P = 34.14 \text{ cm}$



Find  $x$ :  $\tan(45^\circ) = \frac{8}{x}$   
 $1 = \frac{8}{x}$   
 $x = 8$

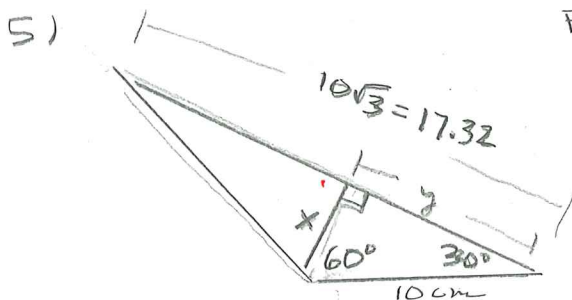
Find  $y$ :  
 $45 \cdot 45 \cdot 90$   
 $y = 8\sqrt{2}$   
 or  $y = 11.31$

Area:  
 $\frac{1}{2}(8)(8)$   
 $A = 64 \text{ cm}^2$   
 Perim:  
 $8 + 8\sqrt{2} = 38.63$   
 $P = 38.63 \text{ cm}$



Find  $x$ :  $\cos(x) = \frac{7}{16}$   
 $x = \cos^{-1}(\frac{7}{16})$   
 $x = 64.1^\circ$

Find  $y$ :  
 $y = 180^\circ - 64.1^\circ - 90^\circ$   
 $y = 25.9^\circ$



Find  $x$ :  
 $\sin(30^\circ) = \frac{x}{10}$   
 $x = 10 \sin(30^\circ)$   
 $x = 5$

Find  $y$ :  
 $y = 5\sqrt{3}$   
 $y = 8.66$

Area:  
 $\frac{1}{2}(10\sqrt{3})(5)$   
 $A = 25\sqrt{3} = 43.30$   
 Perim:  
 $10\sqrt{3} + 10 + 10$   
 $P = 20 + 10\sqrt{3} = 37.32$