

# Practice Worksheet for Lesson 4-4

Name: \_\_\_\_\_

Mailbox #: \_\_\_\_\_

Use the given diagram to answer the following questions.

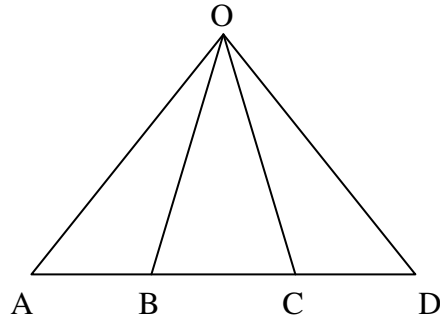
1) If  $\triangle AOD$  is isosceles, with

$OA = OD$ , then  $m\angle \underline{\hspace{1cm}} = m\angle \underline{\hspace{1cm}}$

2) If  $\triangle BOC$  is isosceles, with  
 $m\angle OBC = m\angle OCB$ , then

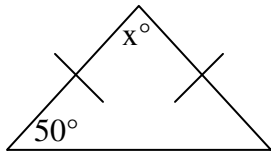
$\underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

3) If  $\triangle AOD$  was a right isosceles triangle with  $m\angle AOD = 90^\circ$ , then the measure of  $\angle A$  would =  $\underline{\hspace{1cm}}$

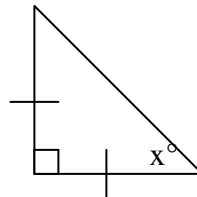


Find the value of  $x$  for the following diagrams.

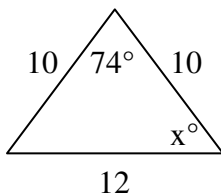
4)



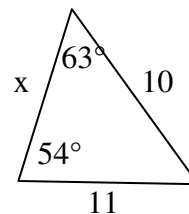
5)



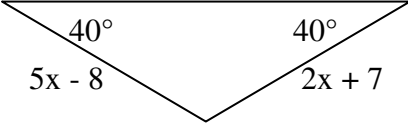
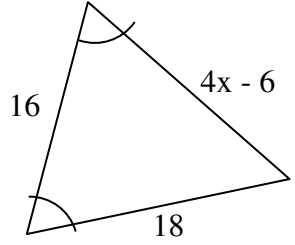
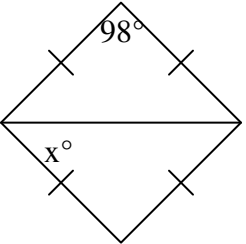
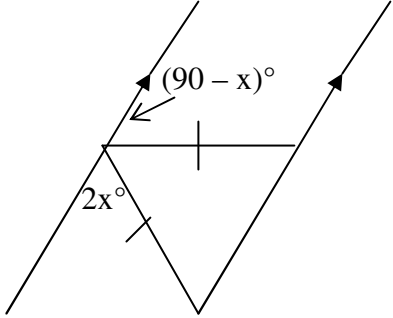
6)



7)



Find the value for  $x$  with the given diagrams

<p>8)</p> 	<p>9)</p> 
<p>10)</p> 	<p>11)</p> 

Solve for  $x$  and  $y$ .

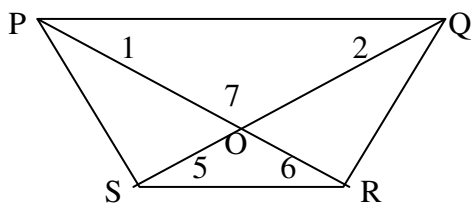
12) In equiangular  $\triangle ABC$ ,  $AB = 4x - y$ ,  $BC = 2x + 3y$ , and  $AC = 7$

13) In equilateral  $\triangle DEF$ ,  $m\angle D = x + y$  and  $m\angle E = 2x - y$

Solve for  $x$ .

14) In  $\triangle JKL$ ,  $JK \cong KL$ ,  $m\angle J = x^2$ ,  $m\angle K = x + 1$ , and  $m\angle L = 3x - 2$

15) Given that  $PO = QO$ ,  $RO = SO$  and  $m\angle 1 = 40^\circ$  solve for the following

<p><math>m\angle 2 =</math></p> <p><math>m\angle 5 =</math></p> <p><math>m\angle 6 =</math></p> <p><math>m\angle 7 =</math></p>	
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