

Practice Worksheet for Lesson 3-2 and 3-3

Name:  
Mailbox #:

In each exercise some information is given. Use this information and the diagram provided to name the segments that must be parallel. If there are no such segments, write *none*.

1)  $\angle 2 \cong \angle 9$

2)  $\angle 6 \cong \angle 7$

3)  $m\angle 1 = m\angle 8 = 90^\circ$

4)  $\angle 5 \cong \angle 9$

5)  $m\angle 2 = m\angle 5$

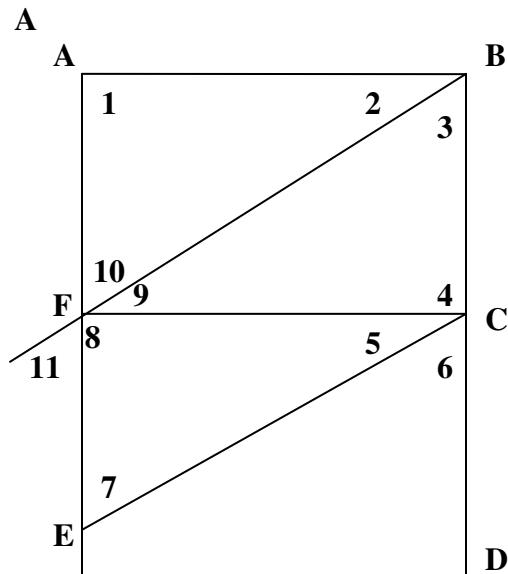
6)  $\angle 3 \cong \angle 11$

7)  $\overline{FC} \perp \overline{AE}$  and  $\overline{FC} \perp \overline{BD}$

8)  $m\angle 5 + m\angle 6 = m\angle 9 + m\angle 10$

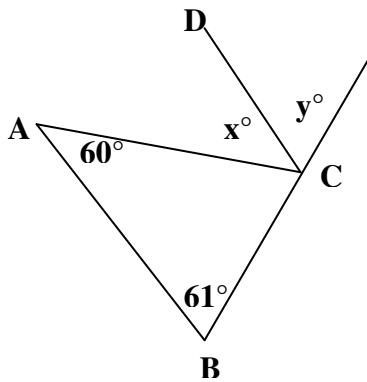
9)  $\angle 7$  and  $\angle EFB$  are supplementary

10)  $m\angle 7 = m\angle 3 = m\angle 10$

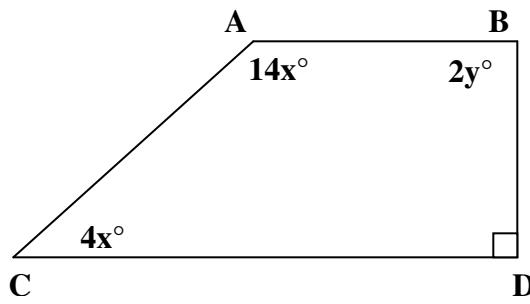


Solve for all the unknown variables.

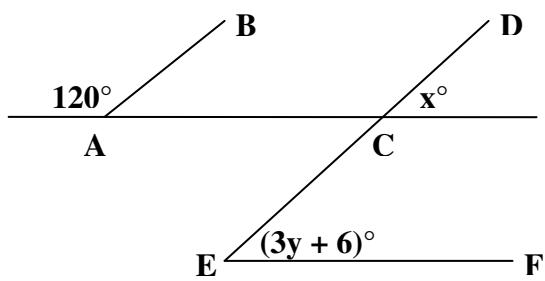
1) line AB || line DC



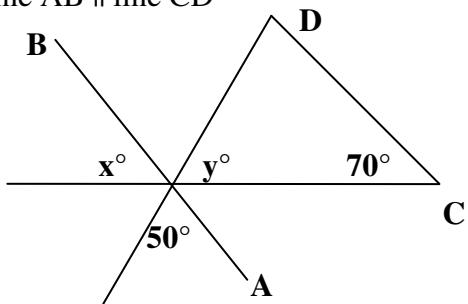
2) line AB || line CD



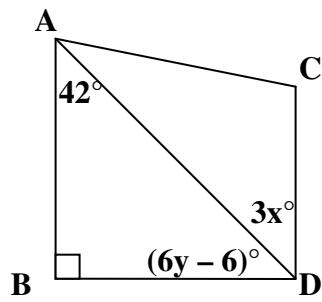
3) line AB  $\parallel$  line CD and line AC  $\parallel$  line EF



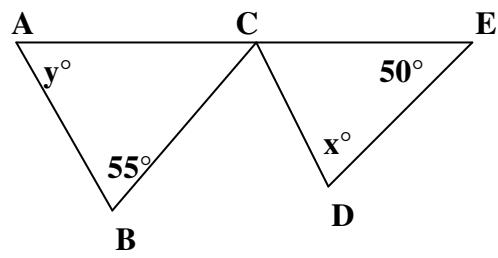
4) line AB  $\parallel$  line CD



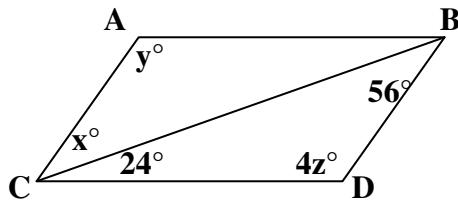
5) line AB  $\parallel$  line CD



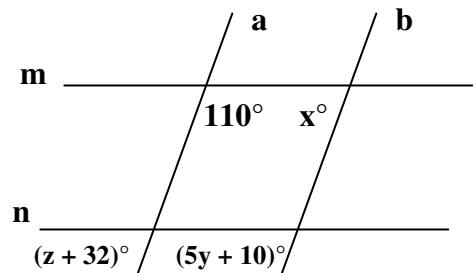
6) line AB  $\parallel$  line CD and line BC  $\parallel$  line DE



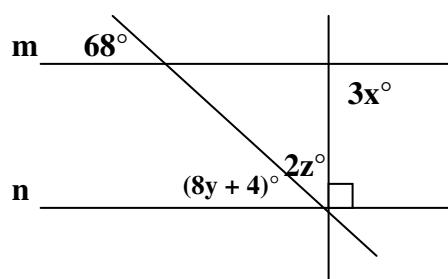
7) line AB  $\parallel$  line CD and line AC  $\parallel$  line BD



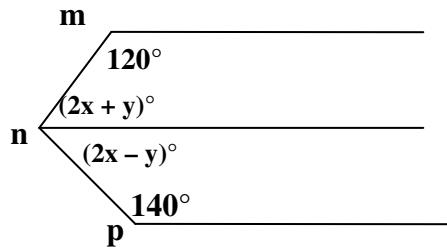
8) a  $\parallel$  b and m  $\parallel$  n



9)  $m \parallel n$

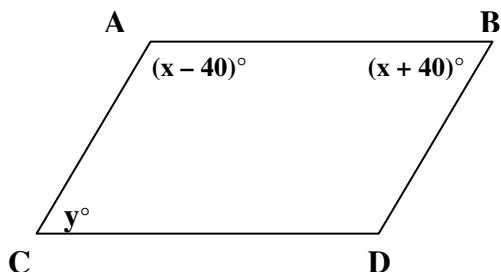


10)  $m \parallel n \parallel p$

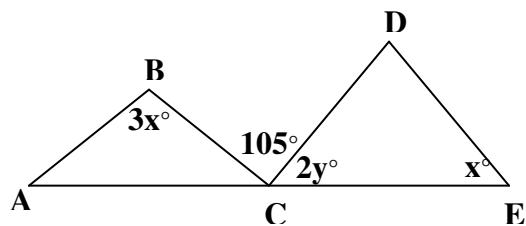


Find the values of x and y that would make:

11)  $\overline{AB} \parallel \overline{CD}$  and  $\overline{AC} \parallel \overline{BD}$

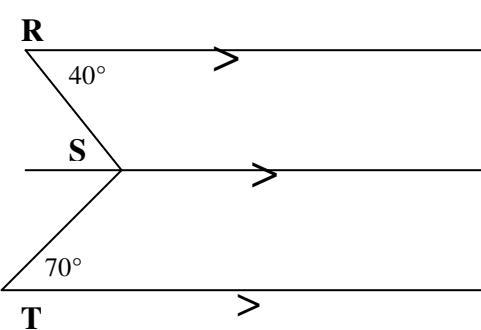


12)  $\overline{AB} \parallel \overline{CD}$  and  $\overline{BC} \parallel \overline{DE}$



Find the measure of  $\angle RST$ .

13)



14) the three lines coming from R, S, and T are all parallel

