Practice Worksheet for Lesson 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) $m\angle 1 = m\angle 8 = 90°$

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

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

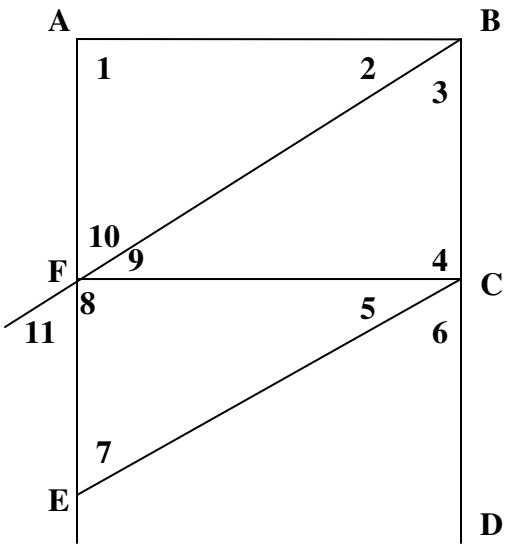
6) $\angle 3 \cong \angle 11$

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



Answer the following statement as true or false.

11) Two lines perpendicular to a third line must be parallel.

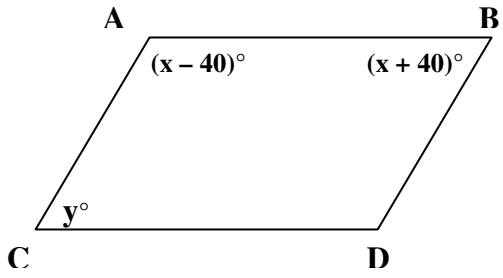
12) In a plane two lines perpendicular to a third line must be parallel.

13) In a plane two lines parallel to a third line must be parallel.

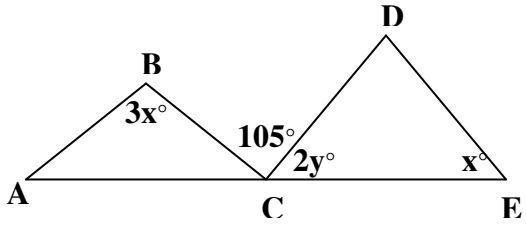
14) Any two lines parallel to a third line must be parallel.

Find the values of x and y that would make:

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

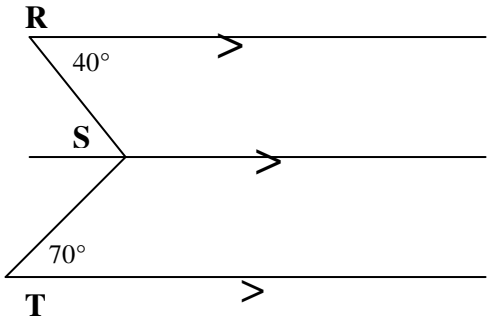


16) $\overline{AB} \parallel \overline{CD}$ and $\overline{BC} \parallel \overline{DE}$

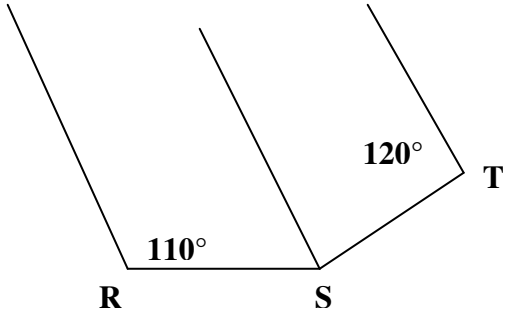


Find the measure of < RST.

17)



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



Find the values of x and y that makes the two horizontal lines parallel.