

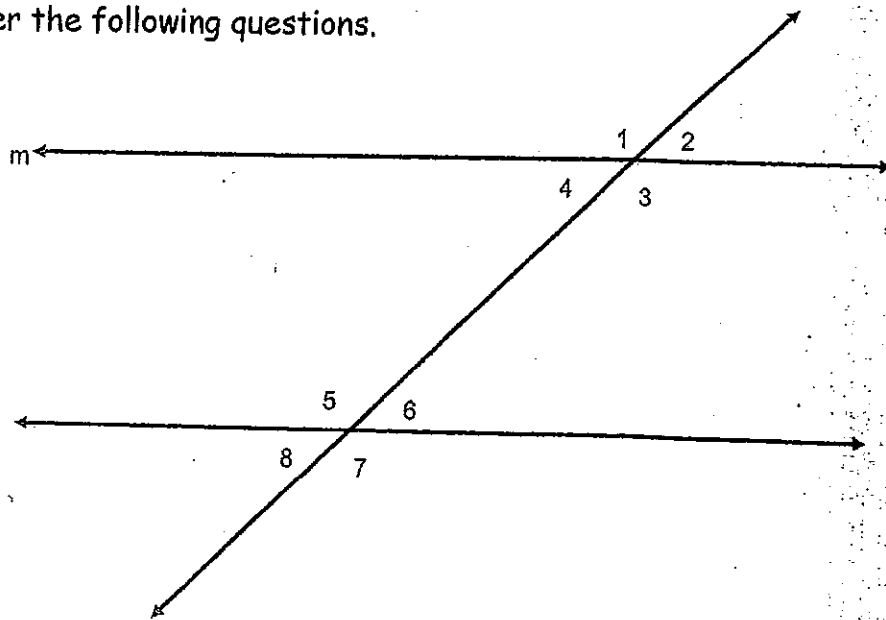
Period: _____

True or False for each question below.

1. Vertical angles are congruent. True or False
2. An acute angle can have the same measure as a right angle. True or False
3. Linear pairs are also complementary angles. True or False
4. Three or more angles can be supplementary. True or False
5. Complementary angles add up to 90° . True or False
6. Adjacent angles share a vertex and a side. True or False
7. A straight line has the same measure as a straight angle. True or False

Use the diagram to the right to answer the following questions.

3. List a pair of alternate interior angles.



- List a pair of corresponding angles.

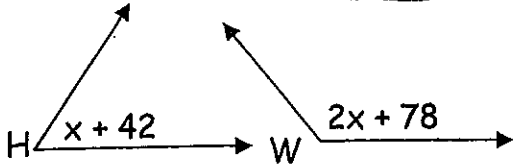
- List all the angles congruent to $\angle 2$.

$\angle 4, \angle 6, \angle 8$

Line m and line n are parallel. Line p is a transversal.

Find the value of the variable then find the measure of each angle. Show all of your work.

11. The angles below are supplementary angles.



$$m\angle H = \underline{62^\circ}$$

$$m\angle W = \underline{118^\circ}$$

$$x + 42 + 2x + 78 = 180^\circ$$

$$\begin{array}{r} 3x + 120 = 180 \\ -120 \quad -120 \\ \hline \end{array}$$

$$\frac{3x}{3} = \frac{60}{3}$$

$$x = 20^\circ$$

$$\begin{aligned} m\angle H &= x + 42 \\ &= 20 + 42 \\ &= 62^\circ \end{aligned}$$

$$\begin{aligned} m\angle W &= 2x + 78 \\ &= 2(20) + 78 \\ &= 40 + 78 \\ &= 118^\circ \end{aligned}$$

Line m and line n are parallel with transversal q. Find the measure of each angle.

$$m\angle 7 = 139^\circ$$

$$m\angle 1 = \underline{139^\circ}$$

$$m\angle 2 = \underline{41^\circ}$$

$$m\angle 3 = \underline{139^\circ}$$

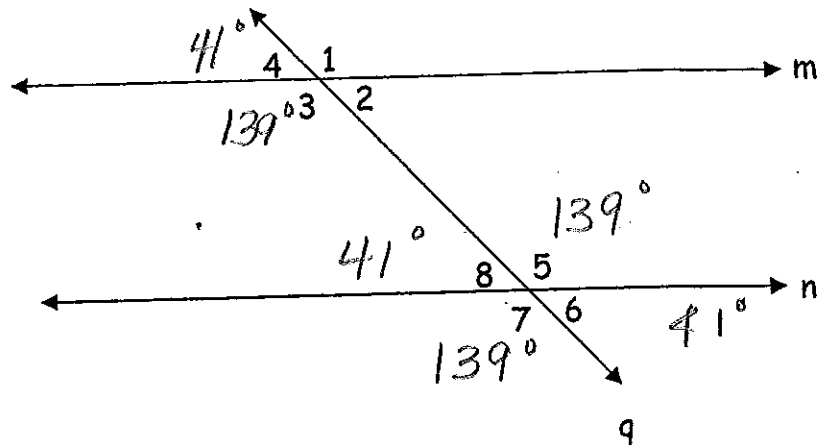
$$m\angle 4 = \underline{41^\circ}$$

$$m\angle 5 = \underline{139^\circ}$$

$$m\angle 6 = \underline{41^\circ}$$

$$m\angle 7 = \underline{139^\circ}$$

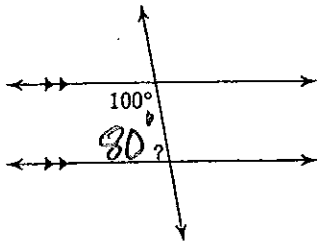
$$m\angle 8 = \underline{41^\circ}$$



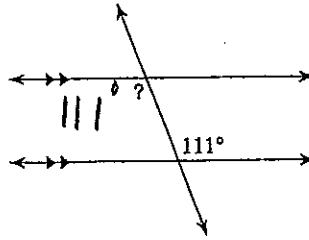
Identify each pair of angles as corresponding, alternate interior, alternate exterior, or consecutive interior. (ISS)

Find the measure of each angle indicated.

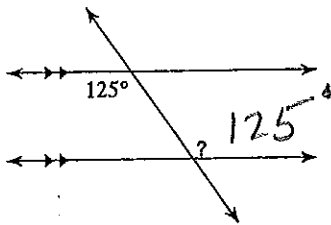
13)



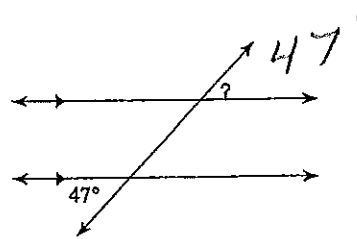
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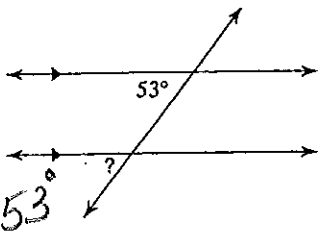
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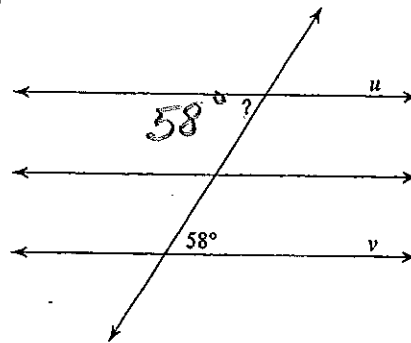
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17)

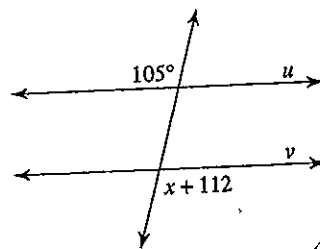


18)



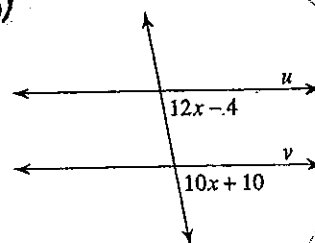
Solve for x.

19)



$$\begin{array}{r} x + 112 = 105 \\ - 112 \quad - 112 \\ \hline x = -7 \end{array}$$

20)



$$\begin{array}{r} 12x - 4 = 10x + 10 \\ - 10x \quad - 10x \\ \hline 2x - 4 = 10 \\ + 4 \quad + 4 \\ \hline 2x = 14 \\ x = 7 \end{array}$$

10

11

12

13