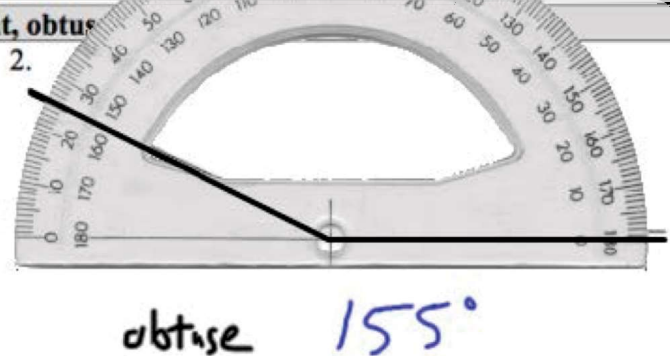
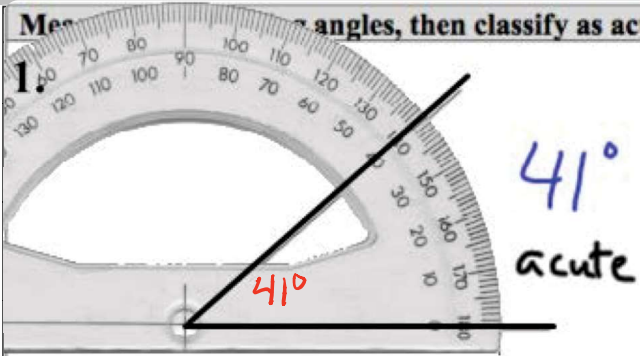


Tools For Geometry – Angles Measures

Hw Section 1.3

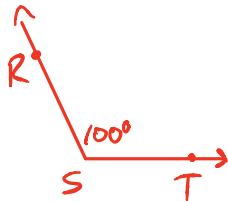
Name _____

Measure angles, then classify as acute, right, obtuse



Draw a figure that fits each description.

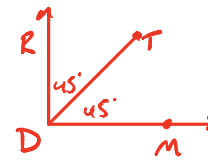
3. an obtuse angle, $\angle RST$



4. a straight angle, $\angle RDM$



5. a right angle, $\angle RDM$ with an angle bisector of \overline{TD} .

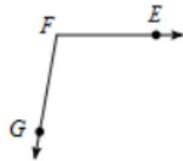


Name the vertex and sides of the angle.

6.

Vertex = F

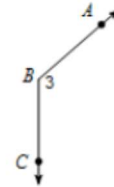
Sides = $\overrightarrow{FE}, \overrightarrow{FG}$



7.

Vertex = B

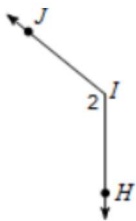
Sides = $\overrightarrow{BA}, \overrightarrow{BC}$



Name the angle four different ways.

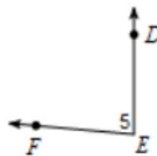
8.

$\angle I, \angle 2, \angle SIH, \angle HIS$



9.

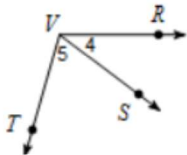
$\angle 5, \angle E, \angle DEF, \angle FED$



Name all the angles that have V as a vertex.

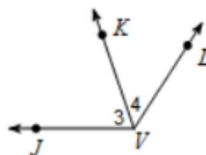
10.

$\angle 4, \angle 5, \angle RVT$



11.

$\angle 3, \angle 4, \angle SVL$



Tools For Geometry – Angles Measures

Hw Section 1.3

Name _____

List all the information given by the diagram.

12.

\overline{UV} bisects \overline{TW}
 $\overline{TW} \cong \overline{TW}$
 $\angle T \cong \angle X$

13.

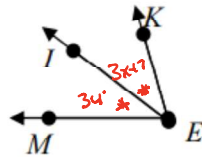
$\overline{FH} \cong \overline{HG}$
 $\angle EFG \cong \angle DGF$

14.

$\overline{NX} \cong \overline{MT}$
 $\overline{WV} \cong \overline{VU}$
 $\angle WSV \cong \angle VSM$

Label the picture and use it to answer the following.

15.
Given
 \overline{EI} is the angle bisector of $\angle MEK$
 $m\angle MEI = 34^\circ$
 $m\angle IEK = 3x + 7$



Find x

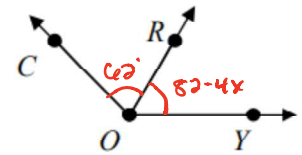
$$m\angle MEI = m\angle IEK$$

$$34 = 3x + 7$$

$$27 = 3x$$

$$9 = x$$

16.
Given
 $\angle COR \cong \angle ROY$
 $m\angle COR = 62^\circ$
 $m\angle ROY = 82 - 4x$



Find x

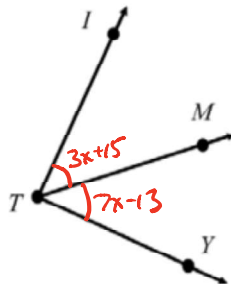
$$m\angle COR = m\angle ROY$$

$$62 = 82 - 4x$$

$$-20 = -4x$$

$$5 = x$$

17.
Given
 \overline{TM} is the angle bisector of $\angle ITY$
 $m\angle ITM = 3x + 15$
 $m\angle MTY = 7x - 13$



Find x

$$m\angle ITM = m\angle MTY$$

$$3x + 15 = 7x - 13$$

$$15 = 4x - 13$$

$$28 = 4x$$

$$7 = x$$

Find $m\angle MTY$

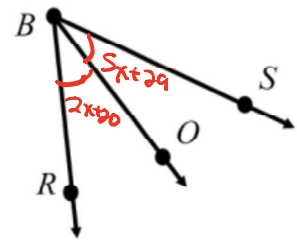
$$m\angle MTY = 7x - 13$$

$$= 7(7) - 13$$

$$= 49 - 13$$

$$m\angle MTY = 36$$

18.
Given
 $\angle RBO \cong \angle SBO$
 $m\angle SBO = 5x + 29$
 $m\angle RBO = 2x + 20$



Find x

$$m\angle SBO = m\angle RBO$$

$$5x + 29 = 2x + 20$$

$$3x + 29 = 20$$

$$3x = -9$$

$$x = -3$$

Find $m\angle RBO$

$$m\angle RBO = 2x + 20$$

$$= 2(-3) + 20$$

$$= -6 + 20$$

$$m\angle RBO = 14$$