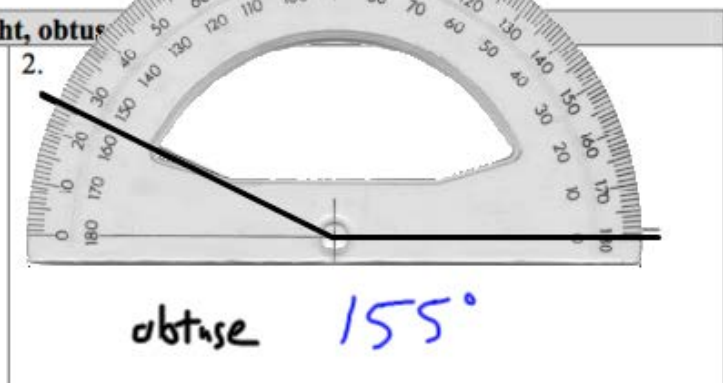
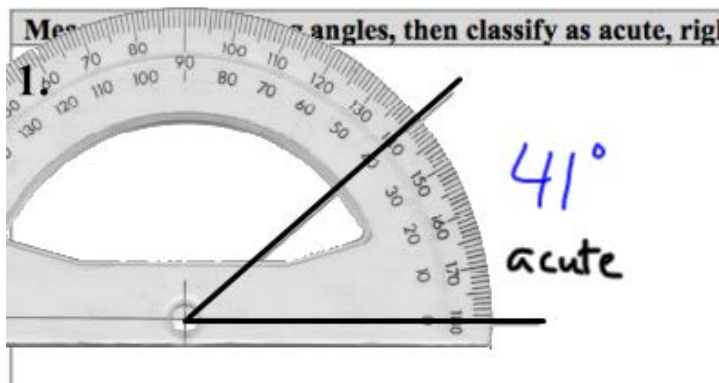


1.3 Practice Solutions

Measure the angles, then classify as acute, right, obtuse.

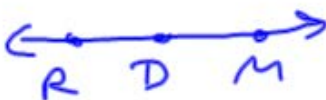


Draw a figure that fits each description.

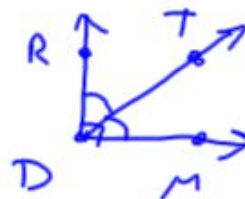
3. an obtuse angle, $\angle RST$



4. a straight angle, $\angle RDM$



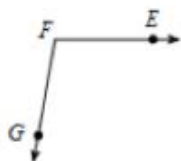
5. a right angle, $\angle RDM$ with an angle bisector of \overline{TD} .



Name the vertex and sides of the angle.

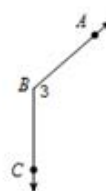
6.

Vertex = F
Sides = \overrightarrow{FE}
 \overrightarrow{FG}



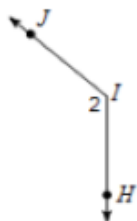
7.

Vertex = B
Sides = \overrightarrow{BA}
 \overrightarrow{BC}



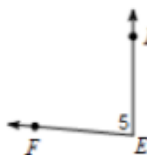
Name the angle four different ways.

8.



$\angle JIH$
 $\angle HIS$
 $\angle 2$
 $\angle I$

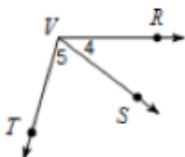
9.



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

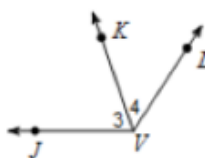
Name all the angles that have V as a vertex.

10.



$\angle RVS$ $\angle 4$
 $\angle TVS$ $\angle 5$
 $\angle RVT$

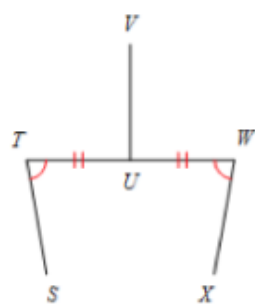
11.



$\angle LVK$ $\angle 4$
 $\angle KVS$ $\angle 5$
 $\angle JVL$

List all the information given by the diagram.

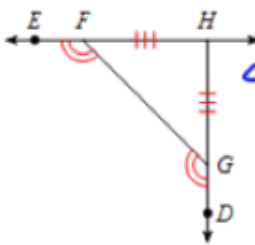
12.



$$\overline{TU} \cong \overline{UW}$$

$$\angle T \cong \angle W$$

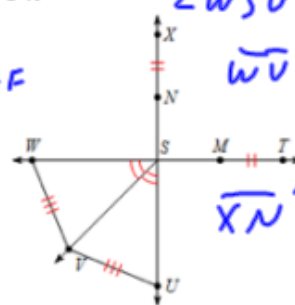
13.



$$\overline{FH} = \overline{HG}$$

$$\angle EFG \cong \angle DGF$$

14.



$$\angle WSV \cong \angle USV$$

$$\overline{WS} \cong \overline{SU}$$

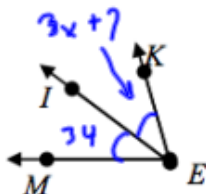
$$\overline{SM} \cong \overline{ST}$$

Label the picture and use it to answer the following.

15.

Given

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



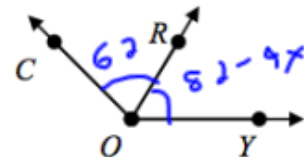
Find x

$$\begin{array}{r} 3x + 7 = 34 \\ -7 \quad -7 \\ \hline 3x = 27 \\ \frac{3x}{3} = \frac{27}{3} \\ x = 9 \end{array}$$

16.

Given

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



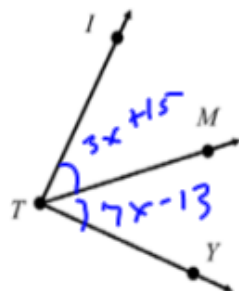
Find x

$$\begin{array}{r} 62 = 82 - 4x \\ -82 \quad -82 \\ \hline -20 = -4x \\ \frac{-20}{-4} = \frac{-4x}{-4} \\ 5 = x \end{array}$$

17.

Given

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



Find x

$$\begin{array}{r} 3x + 15 = 7x - 13 \\ -3x \quad -3x \\ \hline 15 = 4x - 13 \\ +13 \quad +13 \\ \hline 28 = 4x \\ \frac{28}{4} = \frac{4x}{4} \\ 7 = x \end{array}$$

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

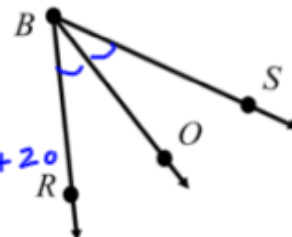
$$\begin{array}{r} 7(7) - 13 \\ 49 - 13 \\ 36 \end{array}$$

$$m\angle MTY = 36^\circ$$

18.

Given

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



Find x

$$\begin{array}{r} 5x + 29 = 2x + 20 \\ -2x \quad -2x \\ \hline 3x + 29 = 20 \\ -29 \quad -29 \\ \hline 3x = -9 \\ \frac{3x}{3} = \frac{-9}{3} \\ x = -3 \end{array}$$

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

$$\begin{array}{r} 2(-3) + 20 \\ -6 + 20 \\ 14 \end{array}$$

$$m\angle RBO = 14^\circ$$