

1-4 Skills Practice

Angle Measure

For Exercises 1-12, use the figure at the right.

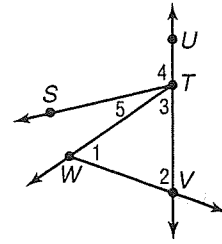
Name the vertex of each angle.

1. $\angle 4$ T

2. $\angle 1$ W

3. $\angle 2$ V

4. $\angle 5$ T



Name the sides of each angle.

5. $\angle 4$ \overrightarrow{TU} \overrightarrow{TS}

6. $\angle 5$ \overrightarrow{TW} \overrightarrow{TS}

7. $\angle 3$ \overrightarrow{TS} \overrightarrow{TV}

8. $\angle 1$ \overrightarrow{TW} \overrightarrow{TV}

Write another name for each angle.

9. $\angle 3$
 $\angle WTV$

10. $\angle 4$
 $\angle UTS$

11. $\angle WTS$
 $\angle S$

12. $\angle 2$
 $\angle TVW$

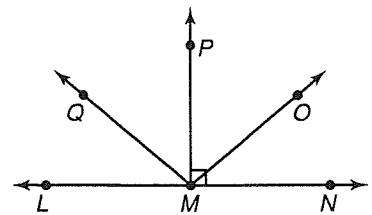
Measure each angle and classify it as *right*, *acute*, or *obtuse*.

13. $\angle NMP$
 90° right

14. $\angle OMN$
 40° acute

15. $\angle QMN$
 140° obtuse

16. $\angle QMO$
 100° obtuse



ALGEBRA In the figure, \overline{BA} and \overline{BC} are opposite rays, \overline{BD} bisects $\angle EBC$, and \overline{BF} bisects $\angle ABE$.

17. If $m\angle EBD = 4x + 16$ and $m\angle DBC = 6x + 4$, find $m\angle EBD$.

$4x + 16$
 $4(6) + 16$
 $24 + 16 = 40^\circ$

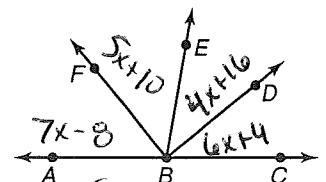
18. If $m\angle ABF = 7x - 8$ and $m\angle EBF = 5x + 10$, find $m\angle EBF$.

$5x + 10$
 $5(9) + 10$

$45 + 10$
 55°

(18) $5x + 10 = 7x - 8$
 $18 = 2x$
 $9 = x$

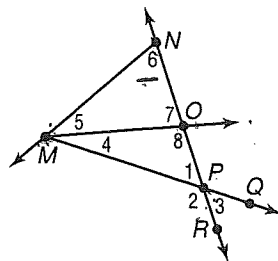
(17) $4x + 16 = 6x + 4$
 $12 = 2x$
 $6 = x$



1-4 Practice

Angle Measure

For Exercises 1-10, use the figure at the right.



Name the vertex of each angle.

- $\angle 5$ M
- $\angle 3$ P
- $\angle 8$ O
- $\angle NMP$ M

Name the sides of each angle.

- $\angle 6$
 \overrightarrow{NM} , \overrightarrow{NP}
- $\angle 2$
 \overrightarrow{RM} , \overrightarrow{MQ}
- $\angle MOP$
 \overrightarrow{MO} , \overrightarrow{OP}
- $\angle OMN$
 \overrightarrow{NM} , \overrightarrow{MO}

$$\begin{aligned} (16) \quad 9x + 3 &= 13x - 9 \\ -9x &\quad -9x \\ \hline 3 &= 4x - 9 \\ +9 &\quad +9 \\ \hline 12 &= 4x \end{aligned}$$

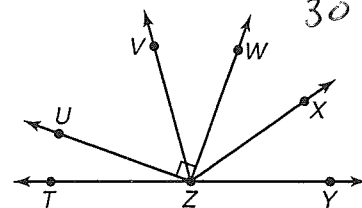
Write another name for each angle.

- $\angle QPR$
 $\angle 3$
- $\angle 1$
 $\angle OPM$

$$\begin{aligned} 3 &= x \\ 13x - 9 & \\ 13(3) - 9 & \\ 39 - 9 & \\ 30 & \end{aligned}$$

Measure each angle and classify it as *right*, *acute*, or *obtuse*.

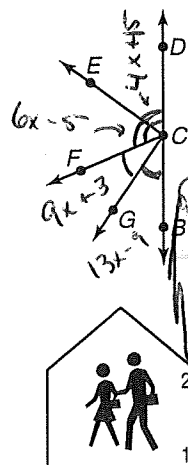
- $\angle UZW$
right 90°
- $\angle YZW$
 70° acute
- $\angle TZW$
 110° obtuse
- $\angle UZT$
 20° acute



ALGEBRA In the figure, \overline{CB} and \overline{CD} are opposite rays, \overline{CE} bisects $\angle DCF$, and \overline{CG} bisects $\angle FCB$.

- If $m\angle DCE = 4x + 15$ and $m\angle ECF = 6x - 5$, find $m\angle DCE$. 55°
- If $m\angle FCG = 9x + 3$ and $m\angle GCB = 13x - 9$, find $m\angle GCB$. 30°

$$\begin{aligned} (15) \quad 4x + 15 &= 6x - 5 \\ -4x &\quad -4x \\ \hline 15 &= 2x - 5 \\ 20 &= 2x \\ 10 &= x \end{aligned}$$

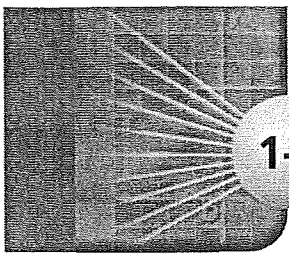


$$\begin{aligned} 4x + 15 &= 6x - 5 \\ 4(10) + 15 &= 6(10) - 5 \\ 40 + 15 &= 60 - 5 \\ 55 &= 55 \end{aligned}$$

17. TRAFFIC SIGNS The diagram shows a sign used to warn drivers of a school zone or crossing. Measure and classify each numbered angle.

- $\angle 1$
right 90°
- $\angle 2$
obtuse 130°

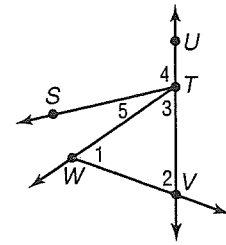




1-4 Skills Practice

Angle Measure

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Name the vertex of each angle.

- | | |
|---------------|---------------|
| 1. $\angle 4$ | 2. $\angle 1$ |
| 3. $\angle 2$ | 4. $\angle 5$ |

Name the sides of each angle.

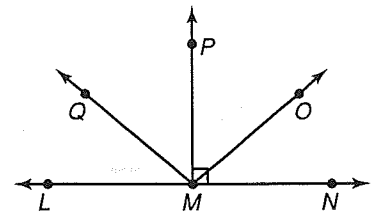
- | | |
|-----------------|---------------|
| 5. $\angle 4$ | 6. $\angle 5$ |
| 7. $\angle STV$ | 8. $\angle 1$ |

Write another name for each angle.

- | | |
|------------------|----------------|
| 9. $\angle 3$ | 10. $\angle 4$ |
| 11. $\angle WTS$ | 12. $\angle 2$ |

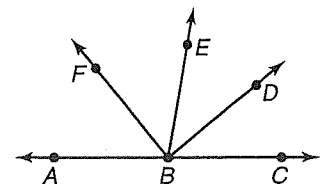
Measure each angle and classify it as *right*, *acute*, or *obtuse*.

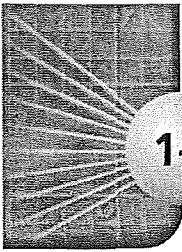
- | | |
|------------------|------------------|
| 13. $\angle NMP$ | 14. $\angle OMN$ |
| 15. $\angle QMN$ | 16. $\angle QMO$ |



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17. If $m\angle EBD = 4x + 16$ and $m\angle DBC = 6x + 4$, find $m\angle EBD$.
18. If $m\angle ABF = 7x - 8$ and $m\angle EBF = 5x + 10$, find $m\angle EBF$.





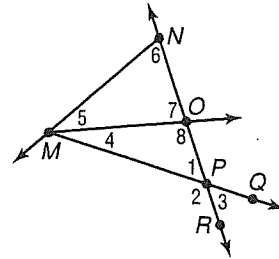
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Name the vertex of each angle.

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- 2. $\angle 3$
- 3. $\angle 8$
- 4. $\angle NMP$



Name the sides of each angle.

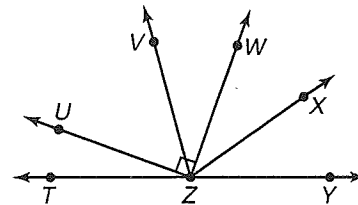
- 5. $\angle 6$
- 6. $\angle 2$
- 7. $\angle MOP$
- 8. $\angle OMN$

Write another name for each angle.

- 9. $\angle QPR$
- 10. $\angle 1$

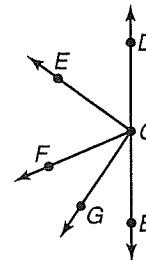
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- 11. $\angle UZW$
- 12. $\angle YZW$
- 13. $\angle TZW$
- 14. $\angle UZT$



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- 15. If $m\angle DCE = 4x + 15$ and $m\angle ECF = 6x - 5$, find $m\angle DCE$.
- 16. If $m\angle FCG = 9x + 3$ and $m\angle GCB = 13x - 9$, find $m\angle GCB$.



- 17. **TRAFFIC SIGNS** The diagram shows a sign used to warn drivers of a school zone or crossing. Measure and classify each numbered angle.

