

5-2-17

Aim: SWBAT find missing angle measurements algebraically.

Do Now: Front side of Review WS

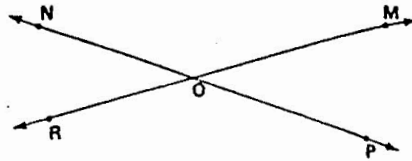
HW: Pg. 406 - 407 # 1 - 9, 14 - 15, 21 - 23

Quiz ??? (Angle Relationships)

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A. Name the adjacent angles in the figure at the right.

- $\angle$  NOM and  $\angle$  MOP are adjacent.
- $\angle$  MOP and  $\angle$  POR are adjacent.
- $\angle$  POR and  $\angle$  RON are adjacent.
- $\angle$  RON and  $\angle$  NOM are adjacent.

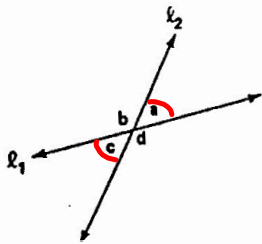


B. Find the complement and the supplement for each given angle.

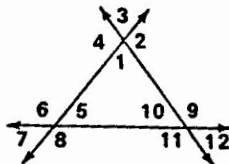
Given angle	Complementary angle <i>sum to 90°</i>	Supplementary angle <i>sum 180°</i>	Given angle	Complementary angle <i>9</i>	Supplementary angle <i>8</i>
$\angle$ AOB = $30^\circ$	$60^\circ$	$150^\circ$	$\angle$ BOC = $47^\circ$	$43^\circ$	$133^\circ$
$\angle$ TOP = $18^\circ$	$72^\circ$	$162^\circ$	$\angle$ OXT = $13^\circ$	$77^\circ$	$167^\circ$
$\angle$ ABC = $89^\circ$	$1^\circ$	$91^\circ$	$\angle$ AVF = $73^\circ$	$17^\circ$	$107^\circ$
$\angle$ PRS = $63^\circ$	$27^\circ$	$117^\circ$	$\angle$ SPL = $35^\circ$	$55^\circ$	$145^\circ$
$\angle$ SOM = $80^\circ$	$10^\circ$	$100^\circ$	$\angle$ MNO = $84^\circ$	$6^\circ$	$96^\circ$
$\angle$ STN = $57^\circ$	$33^\circ$	$123^\circ$	$\angle$ TNR = $55^\circ$	$35^\circ$	$125^\circ$

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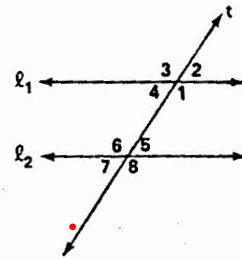
List all the vertical angles in each figure.



- $\angle$  a and  $\angle$  c
- $\angle$  b and  $\angle$  d



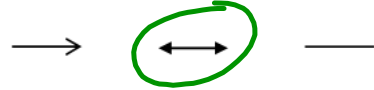
- $\angle$  1 and  $\angle$  3
- $\angle$  2 and  $\angle$  4
- $\angle$  5 and  $\angle$  7
- $\angle$  6 and  $\angle$  8
- $\angle$  9 and  $\angle$  11
- $\angle$  10 and  $\angle$  12



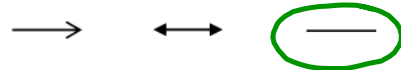
- $\angle$  1 and  $\angle$  3
- $\angle$  2 and  $\angle$  4
- $\angle$  5 and  $\angle$  7
- $\angle$  6 and  $\angle$  8

Angle Relationships Review

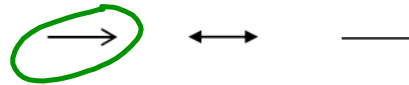
Circle the notation used when naming a line.



Circle the notation used when naming a line segment.



Circle the notation used when naming a ray.



How many letters are used when name a line, line segment, or ray?

1    2    3

\* For which does the order of the terms matter? Line    Segment

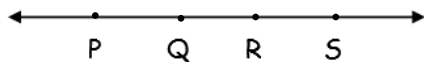
Ray

Name line AB in proper geometric notation. ↔ AB

Name line segment AB in proper geometric notation. — AB

Name ray AB in proper geometric notation. → AB

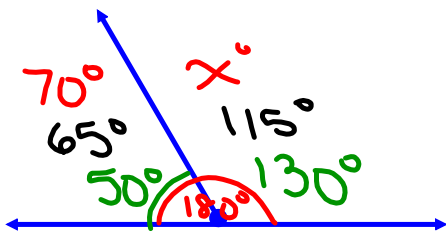
Use the the following diagram to answer the next set of questions.



Name a ray with endpoint R that goes to the left. ← RQ or ← RP

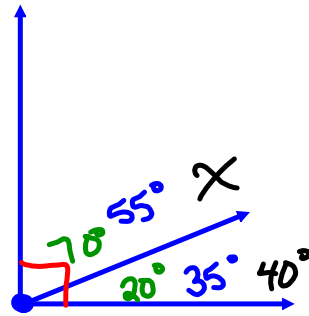
Name three different line segments. — PQ ; — PR ; — PS

Name the line three different ways. ↔ PQ ; ↔ PR ; ↔ PS



Supplementary

$$\begin{array}{r}
 70^\circ + x^\circ = 180^\circ \\
 -70^\circ \qquad -70^\circ \\
 \hline
 x = 110^\circ
 \end{array}$$



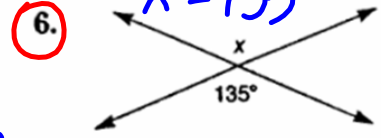
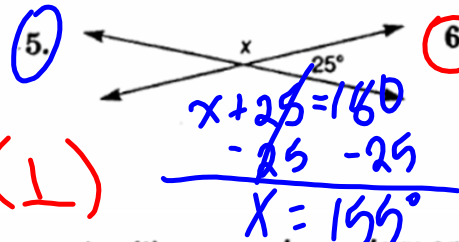
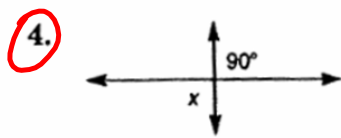
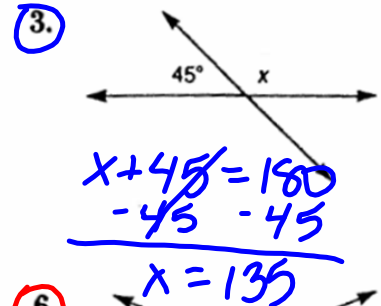
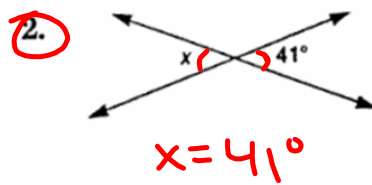
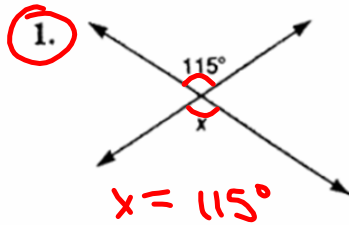
Complementary

$$\begin{array}{r}
 40 + x = 90 \\
 -40 \qquad -40 \\
 \hline
 x = 50
 \end{array}$$

vertical :  $\cong$   
Angle Relationships

complementary :  $90^\circ$  supplementary  $180^\circ$

Find the value of  $x$  in each figure.



perpendicular ( $\perp$ )

Each of the following pairs of angles is either complementary or supplementary. Find the measure of each angle.

