

5-8-17

Aim: SWBAT find missing angle measurements and justify.

Do Now: What are the three angle relationships that have a number associated with the relationship? What number is associated with each?

HW: ~~Pg. 407 # 24-25~~ Redo WS

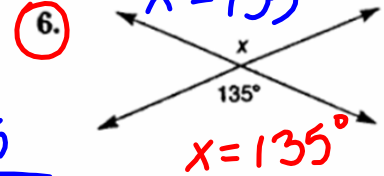
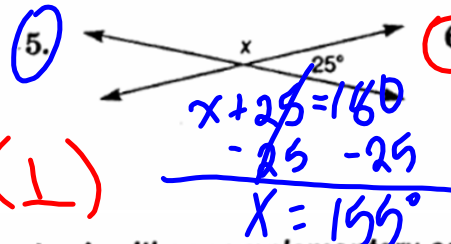
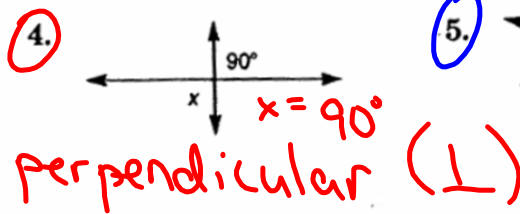
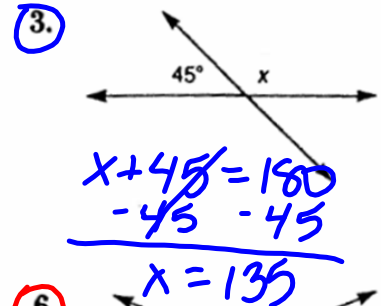
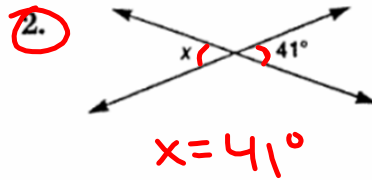
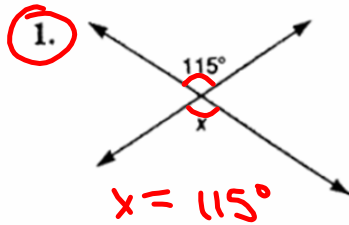
Quiz Wednesday (Angle Relationships)

Final Review Packet due June 2

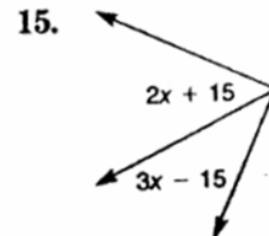
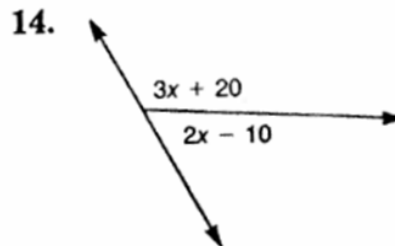
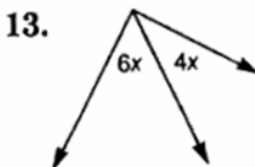
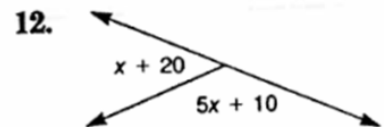
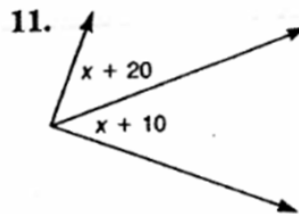
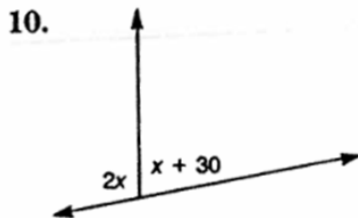
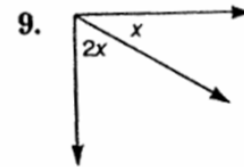
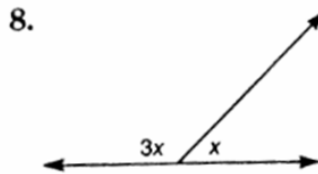
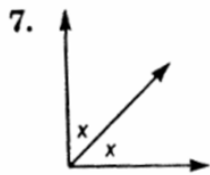
vertical : \cong
Angle Relationships

complementary : 90° supplementary 180°

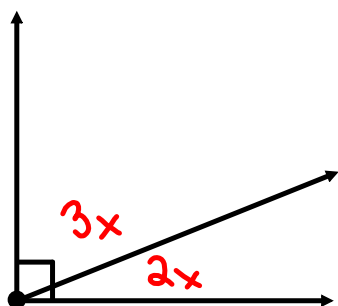
Find the value of x in each figure.



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



Complementary Angles are angles whose sum is 90° .



Solve algebraically.

$$3x + 2x = 90$$

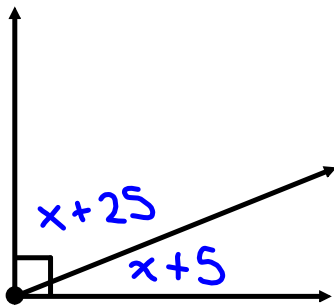
$$\frac{\cancel{5}x}{5} = \frac{90}{5}$$

$$x = 18$$

$$3x$$
$$3 \cdot 18$$
$$54^\circ$$

$$2x$$
$$2 \cdot 18$$
$$36^\circ$$

Complementary Angles are angles whose sum is 90° .



Solve algebraically.

$$\boxed{x+25} + \boxed{x+5} = 90$$

$$2x + 30 = 90$$

$$\begin{array}{r} -30 \\ -30 \end{array}$$

$$\frac{2x}{2} = \frac{60}{2}$$

$$x = 30$$

$$x+25$$

$$30+25$$

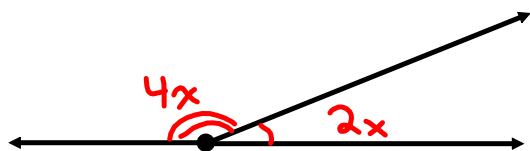
$$55^\circ$$

$$x+5$$

$$30+5$$

$$35^\circ$$

Supplementary Angles are angles whose sum is 180° .



Solve algebraically.

$$4x + 2x = 180$$

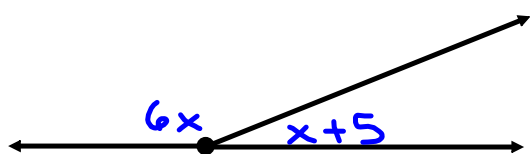
$$\frac{6x}{6} = \frac{180}{6}$$

$$x = 30$$

$$\begin{array}{l} 4x \\ 4 \cdot 30 \\ 120^\circ \end{array}$$

$$\begin{array}{l} 2x \\ 2 \cdot 30 \\ 60^\circ \end{array}$$

Supplementary Angles are angles whose sum is 180° .



Solve algebraically.

$$\boxed{6x} + \boxed{x+5} = 180$$

$$7x + 5 = 180$$

$$\begin{array}{r} 7x + 5 = 180 \\ -5 \quad -5 \\ \hline 7x = 175 \\ \hline x = 25 \end{array}$$

$$\begin{array}{l} 6x \\ 6 \cdot 25 \\ 150^\circ \end{array}$$

$$\begin{array}{l} x+5 \\ 25+5 \\ 30^\circ \end{array}$$