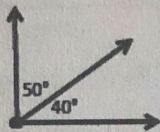
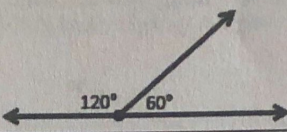


Name: Key Date: \_\_\_\_\_

## Complementary & Supplementary Angles

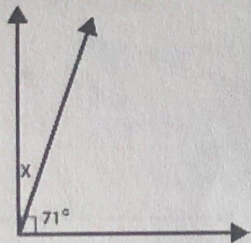
1. An angle is a figure formed by two rays with a common endpoint.
2. A vertex is a point of intersection of two sides of an angle.
3. Complementary Angles: Two angles whose sum is  $90^\circ$ .
4. Supplementary Angles: Two angles whose sum is  $180^\circ$

	
<b>Complementary Angles</b> add up to <u><math>90^\circ</math></u>	<b>Supplementary Angles</b> add up to <u><math>180^\circ</math></u>

Complementary  
= form a  
= corner.

Supplementary  
= form a  
= straight line.

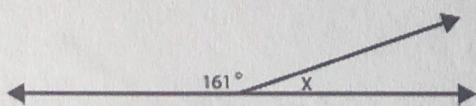
5. Write and solve an equation to find the value of x.



$$\begin{array}{r} 71 + x = 90 \\ -71 \quad | \quad -71 \\ \hline \boxed{x = 19} \end{array}$$

check:  
 $71 + 19 = 90 \checkmark$

6. Write and solve an equation to find the value of x.



$$\begin{array}{r} 161 + x = 180 \\ -161 \quad | \quad -161 \\ \hline \boxed{x = 19} \end{array}$$

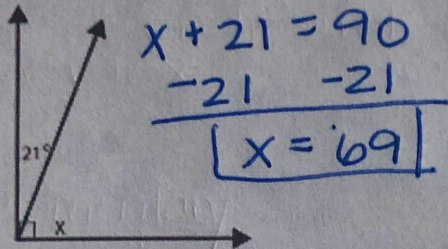
check:  
 $161 + 19 = 180 \checkmark$

Name: \_\_\_\_\_

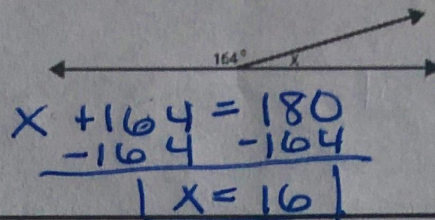
Date: \_\_\_\_\_

# Practice: Complementary & Supplementary Angles

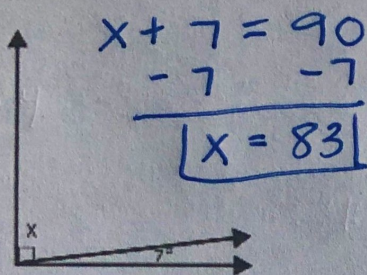
#1 Find the missing angle.



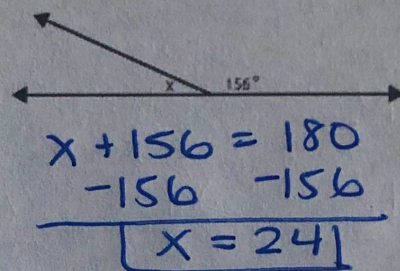
#2 Find the missing angle.



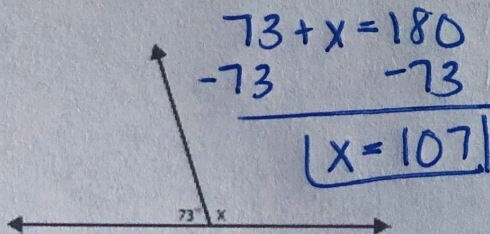
#3 Find the missing angle.



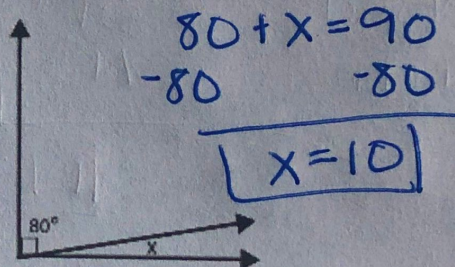
#4 Find the missing angle.



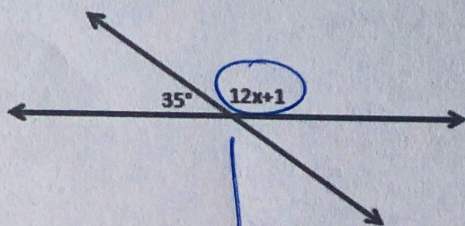
#5 Find the missing angle.



#6 Find the missing angle.



#7 Write and solve an equation to find the value of x.



$$\begin{array}{r} \boxed{35} + \boxed{12x} + \boxed{1} = 180 \\ 36 + 12x = 180 \\ -36 \quad -36 \\ \hline 12x = 144 \\ \frac{12x}{12} = \frac{144}{12} \\ \boxed{x = 12} \end{array}$$

© K. Coners, 2016 www.tothesquareinch.com

To find the angle measure

$$\begin{array}{r} 12(12) + 1 \\ 144 + 1 \\ \boxed{= 145} \end{array}$$