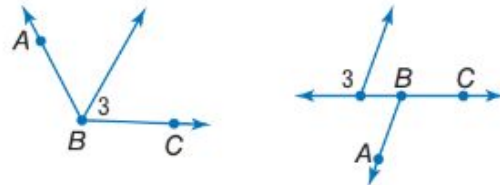


**Adjacent Angles:**

**Examples**  $\angle 1$  and  $\angle 2$  are adjacent angles.



**Nonexamples**  $\angle 3$  and  $\angle ABC$  are nonadjacent angles

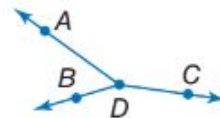


**Linear Pair:**

**Example**  $\angle 1$  and  $\angle 2$

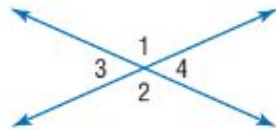


**Nonexample**  $\angle ADB$  and  $\angle ADC$

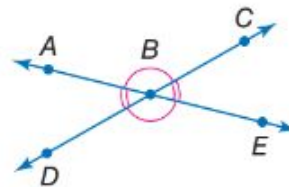
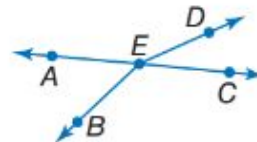


**Vertical Angles:**

**Examples**  $\angle 1$  and  $\angle 2$ ;  $\angle 3$  and  $\angle 4$

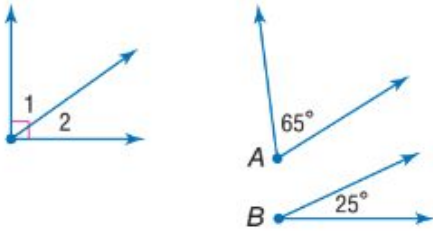


**Nonexample**  $\angle AEB$  and  $\angle DEC$

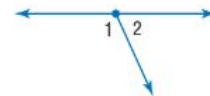
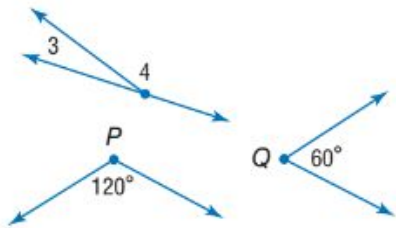


Vertical angles are \_\_\_\_\_

**Complementary Angles:**

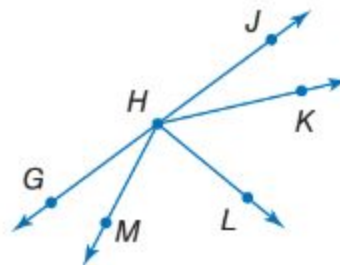


**Supplementary Angles:**



The angles in a linear pair are \_\_\_\_\_

**NEVER ASSUME ANYTHING!!!**

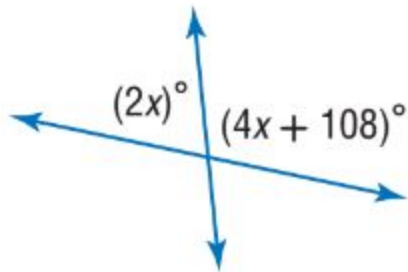


Examples:

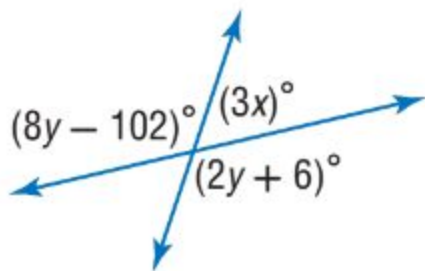
1. Find the value of each variable:

1.5 Angle Relationships  
Geometry

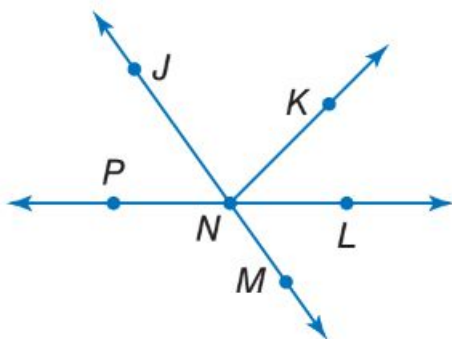
a.



b.



2. If  $m\angle JNP = 3x - 15$  and  $m\angle JNL = 5x + 59$  find the value of  $x$  so that  $\angle JNP$  and  $\angle JNL$  are supplements of each other.



PSAT:

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If  $f(x - 1) = 2x + 3$  for all values of  $x$ , what is the value of  $f(-3)$  ?

- A)  $-7$
- B)  $-5$
- C)  $-3$
- D)  $-1$

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Which of the following is equivalent to  $(s - t)\left(\frac{s}{t}\right)$  ?

- A)  $\frac{s}{t} - s$
- B)  $\frac{s}{t} - st$
- C)  $\frac{s^2}{t} - s$
- D)  $\frac{s^2}{t} - \frac{s}{t^2}$