

# Equations with the variable on both sides

<sup>B, C</sup>  
①  $4x - 185 = 76 - 5x$

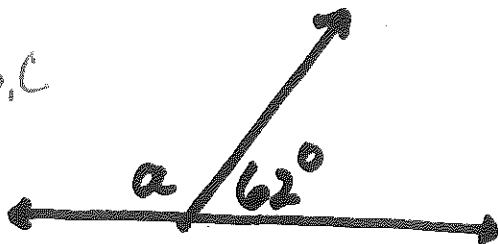
<sup>A</sup>  
②  $-2x - 23 = 28 + x$

<sup>A</sup>  
③  $-3x - 41 = x + 75$

<sup>A</sup>  
④  $-106 - 6x = 3x + 74$

⑤

A, B, C

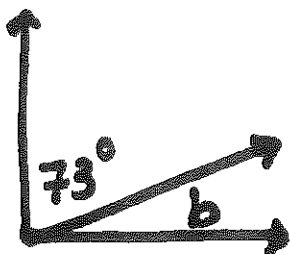


How many degrees is angle  $a$ ?  
Write an equation & then solve it.

These angles are called \_\_\_\_\_.

⑥

A, B, C

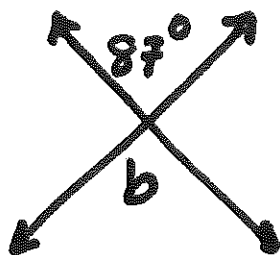


How many degrees is angle  $b$ ?  
Write an equation & then solve it.

These angles are called \_\_\_\_\_.

⑦

A, B, C

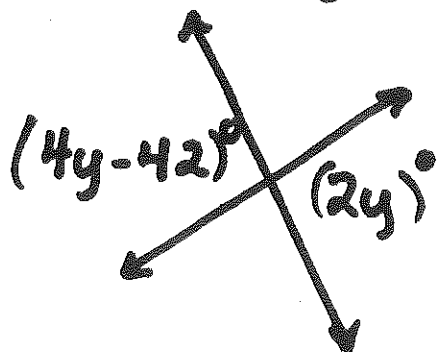


How many degrees is angle  $b$ ?  
Why?

These angles are called \_\_\_\_\_.

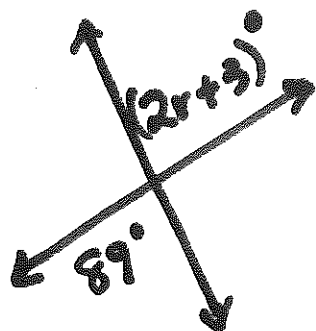
B.C

- ⑧ Find  $y$  and then tell the measures of each angle.



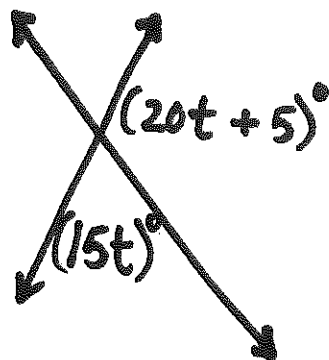
A, B, C

- ⑨ Find  $r$  and then tell the measures of each angle.

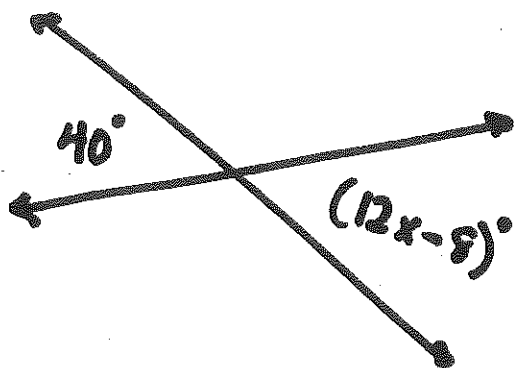


A, B, C

- ⑩ Find  $t$  and then tell the measures of each angle.

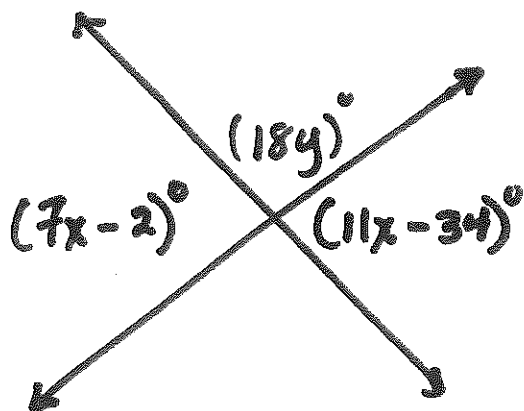


11 A



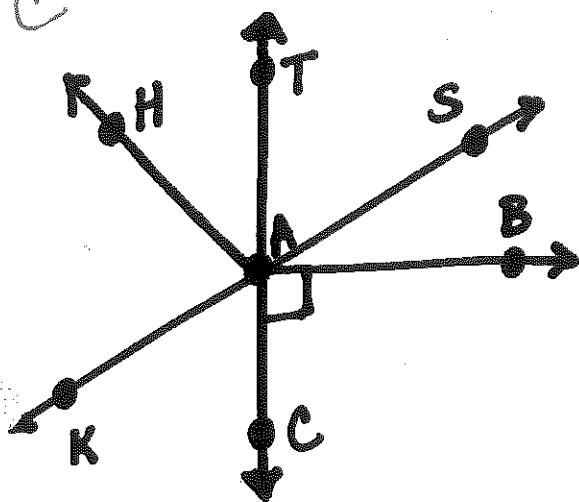
Find the value of  $x$ .  
Then tell how many degrees each angle is.

12 C



Find the values of  $x$  and  $y$ . Tell how many degrees each angle is.

13 C



a)  $\angle HAK$  and  $\angle$  \_\_\_\_\_ are supplementary angles.

b)  $\angle SAT$  and  $\angle$  \_\_\_\_\_ are supplementary angles.

c)  $\angle TAS$  and  $\angle$  \_\_\_\_\_ are Complementary angles.

A, B, C

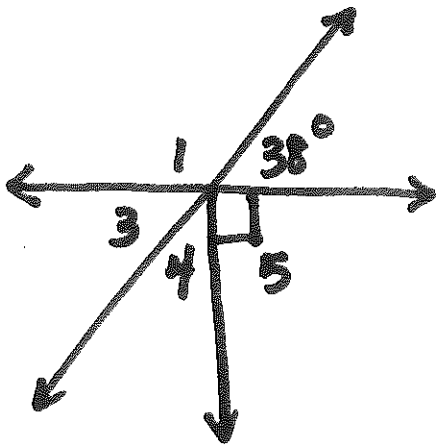
(14) What is the supplement of a  $47^\circ$  angle?

A, B, C

(15) What is the complement of a  $54^\circ$  angle?

B, C

(16)



a) What is the measure of  $\angle 3$ ? Why?

b) Draw a line in angle 5 to make a pair of complementary angles.

(17)  $-150 - 11x = 66 - 3x$

<sup>B</sup>  
⑮  $-7x - 3x + 2 = -8x - 8$

<sup>C</sup>  
⑰  $7(5a - 4) - 1 = 14 - 8a$

<sup>C</sup>  
⑳  $8x + 4(4x - 3) = 4(6x + 4) - 4$