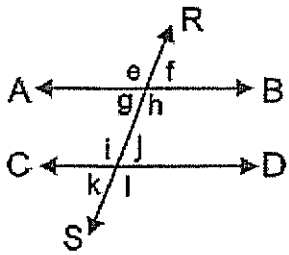
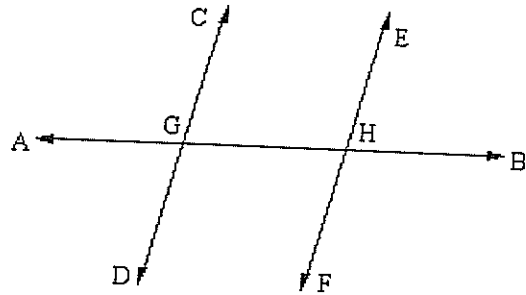


Name: _____



Line RS is a transversal of line AB and line CD.

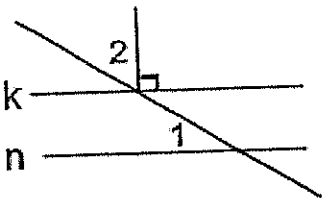
Name the corresponding angles.



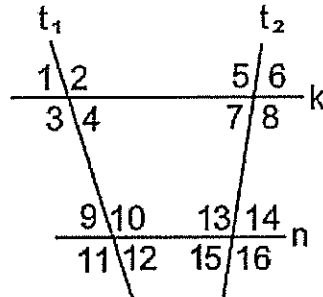
$\overleftrightarrow{CD} \parallel \overleftrightarrow{EF}$

Name all of the angles that must be congruent to $\angle BHE$.

If $k \parallel n$, $m\angle 1 = (2x + 7)^\circ$, and $m\angle 2 = (3x - 15)^\circ$, find the value of x .



Which of the following statements must be true if $k \parallel n$?



Option I. $m\angle 7 + m\angle 10 = 180^\circ$

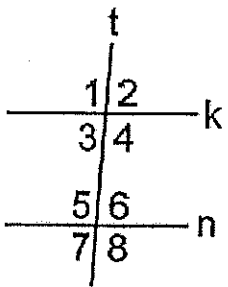
Option II. $m\angle 12 = m\angle 13$

Option III. $m\angle 6 = m\angle 15$

Option IV. $m\angle 4 = m\angle 14$

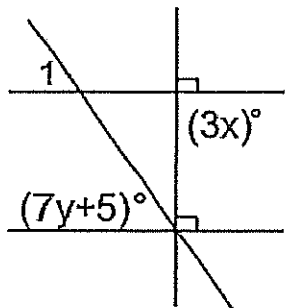
- (A) III only
- (B) I, II and IV
- (C) I only
- (D) I and IV only
- (E) II and III only

In the diagram, k and n are two parallel lines cut by a transversal t . Which of the following relationship is NOT true?

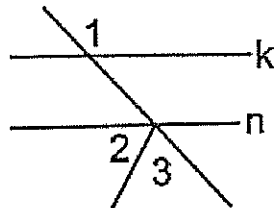


- (A) $m\angle 2 = m\angle 5$
- (B) $m\angle 1 = m\angle 8$
- (C) $m\angle 3 = m\angle 7$
- (D) $m\angle 4 = m\angle 5$

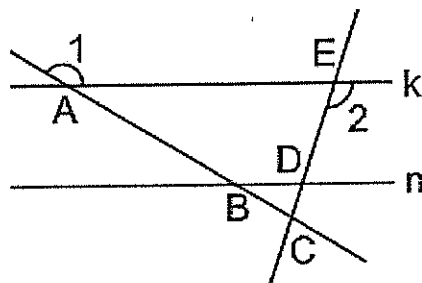
If $m\angle 1 = 54^\circ$, find the values of x and y .



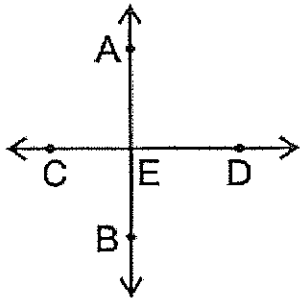
$m\angle 1 = 135^\circ$, $m\angle 2 = 64^\circ$, $m\angle 3 = 70^\circ$. Is $k \parallel n$? If so, explain how.



If $k \parallel n$, $m\angle 1 = 127^\circ$, and $m\angle 2 = 99^\circ$, find the measure of $\angle ACE$.



Which of the following statements must be true if $m\angle AED = 90^\circ$?

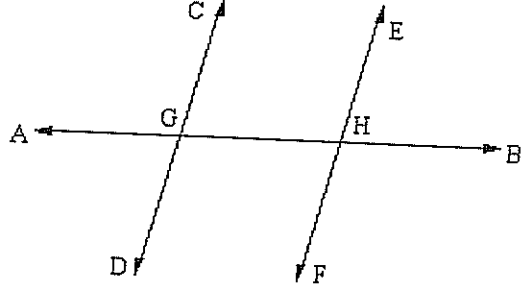


Option I. $\angle BEC$ is a right angle.

Option II. $\overline{AB} \perp \overline{CD}$

Option III. $\angle AEC$ and $\angle BEC$ are complementary.

- A I only
- B I, II, and III
- C III only
- D I and II only



$$\overleftrightarrow{CD} \parallel \overleftrightarrow{EF}$$

$$m\angle DGH = (94 + x)^\circ$$

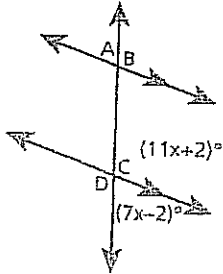
$$m\angle FHG = (4x + 226)^\circ$$

Find the value of x .

Algebra and Transversals

Use what you know about transversal angles to write an algebraic equation. Solve for x . Then find the measure of the given angles.

1



_____ + _____ = 180°

$x =$ _____

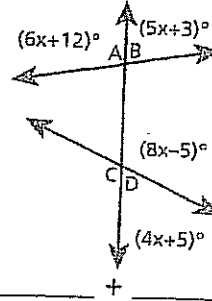
$m\angle A =$ _____

$m\angle B =$ _____

$m\angle C =$ _____

$m\angle D =$ _____

2



_____ + _____ = 180°

_____ + _____ = 180°

$x =$ _____

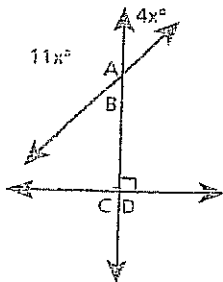
$m\angle A =$ _____

$m\angle B =$ _____

$m\angle C =$ _____

$m\angle D =$ _____

3



_____ + _____ = 180°

$x =$ _____

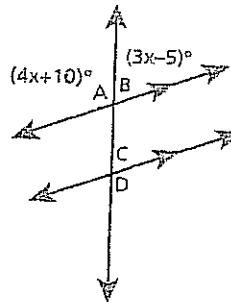
$m\angle A =$ _____

$m\angle B =$ _____

$m\angle C =$ _____

$m\angle D =$ _____

4



_____ + _____ = 180°

$x =$ _____

$m\angle A =$ _____

$m\angle B =$ _____

$m\angle C =$ _____

$m\angle D =$ _____