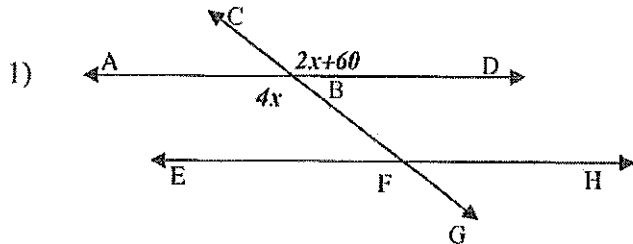


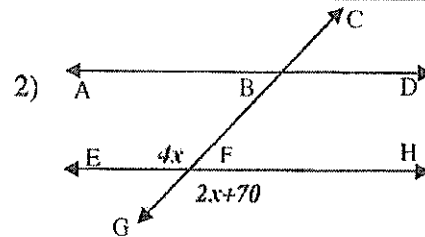
**FINDING UNKNOWN ANGLE MEASURES – CONGRUENT ANGLES-#3**

**Directions:** Find the measure of each missing angle in the parallel lines and transversals below. Each pair of angles are either *vertical angles*, *alternate angles*, or *corresponding angles*; so they are congruent. All you have to do is set up and solve an equation where the expressions are congruent. Once you've solved for  $x$ , plug that value back into each expression to find the measure of each angle.



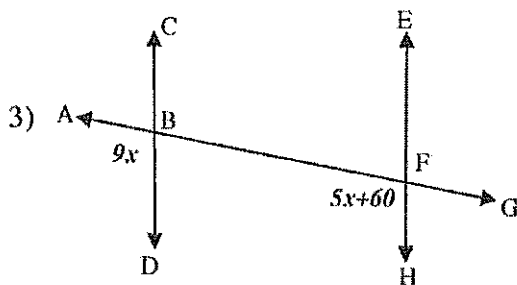
Equation: \_\_\_\_\_

$x =$  \_\_\_\_\_  $\angle ABG =$  \_\_\_\_\_  $\angle CBD =$  \_\_\_\_\_



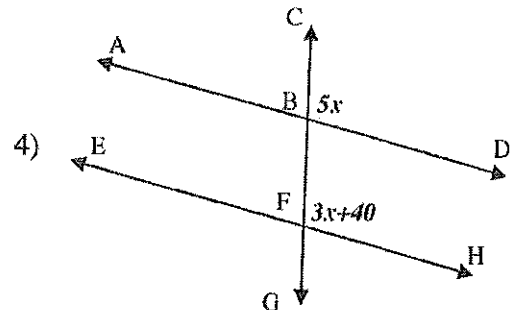
Equation: \_\_\_\_\_

$x =$  \_\_\_\_\_  $\angle EFB =$  \_\_\_\_\_  $\angle GFH =$  \_\_\_\_\_



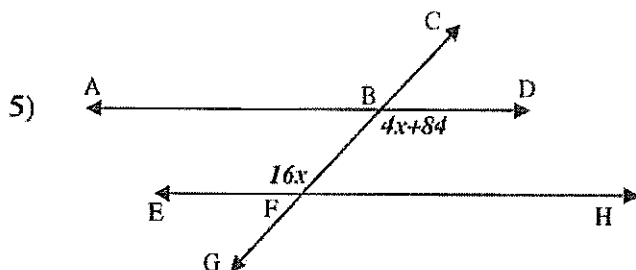
Equation: \_\_\_\_\_

$x =$  \_\_\_\_\_  $\angle ABD =$  \_\_\_\_\_  $\angle HFA =$  \_\_\_\_\_



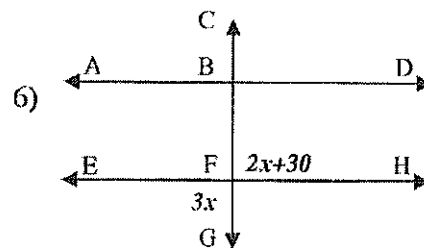
Equation: \_\_\_\_\_

$x =$  \_\_\_\_\_  $\angle CBD =$  \_\_\_\_\_  $\angle HFC =$  \_\_\_\_\_



Equation: \_\_\_\_\_

$x =$  \_\_\_\_\_  $\angle GBD =$  \_\_\_\_\_  $\angle EFC =$  \_\_\_\_\_

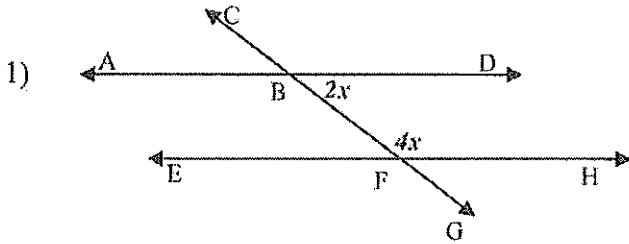


Equation: \_\_\_\_\_

$x =$  \_\_\_\_\_  $\angle EFG =$  \_\_\_\_\_  $\angle HFC =$  \_\_\_\_\_

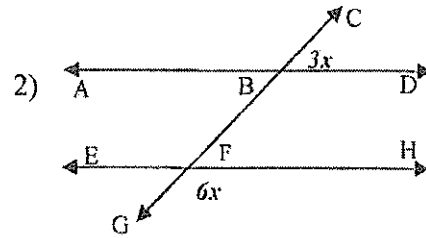
**FINDING UNKNOWN ANGLE MEASURES—SUPPLEMENTARY ANGLES--#5**

**Directions:** Find the measure of each missing angle in the parallel lines and transversals below. Each pair of angles are *supplementary* to each other, which means the angles add up to  $180^\circ$ . All you have to do is set up and solve an equation where the expressions add up to equal  $180^\circ$ . Once you've solved for  $x$ , plug that value back into each expression to find the measure of each angle.



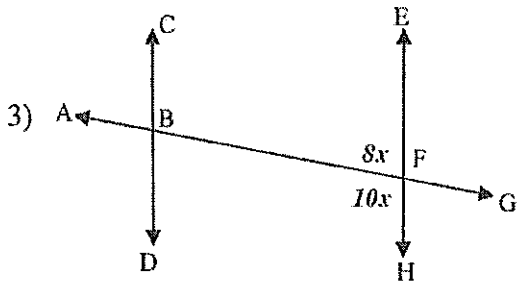
Equation: \_\_\_\_\_

$x =$  \_\_\_\_\_  $\angle HFC =$  \_\_\_\_\_  $\angle DBG =$  \_\_\_\_\_



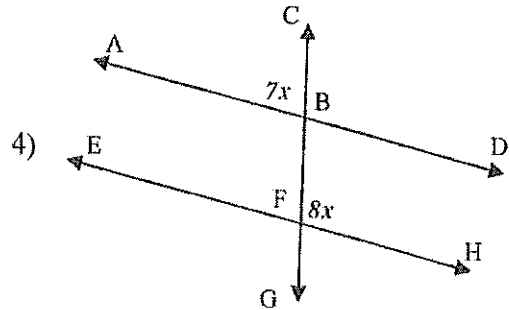
Equation: \_\_\_\_\_

$x =$  \_\_\_\_\_  $\angle CBD =$  \_\_\_\_\_  $\angle GFH =$  \_\_\_\_\_



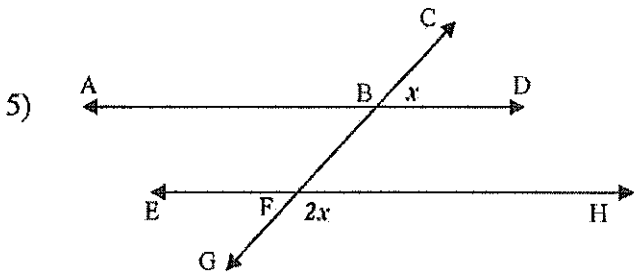
Equation: \_\_\_\_\_

$x =$  \_\_\_\_\_  $\angle AFH =$  \_\_\_\_\_  $\angle AFE =$  \_\_\_\_\_



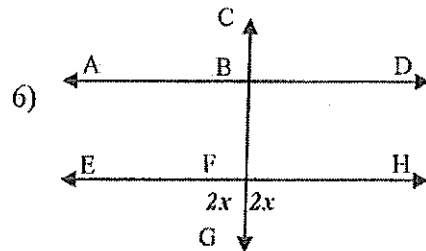
Equation: \_\_\_\_\_

$x =$  \_\_\_\_\_  $\angle CBA =$  \_\_\_\_\_  $\angle CFH =$  \_\_\_\_\_



Equation: \_\_\_\_\_

$x =$  \_\_\_\_\_  $\angle GFH =$  \_\_\_\_\_  $\angle CBD =$  \_\_\_\_\_

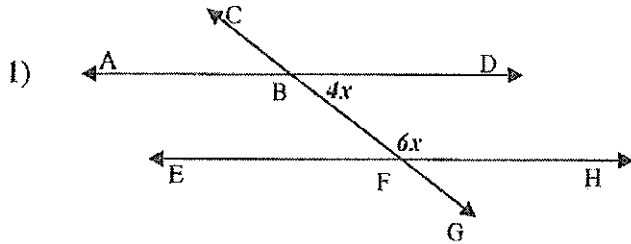


Equation: \_\_\_\_\_

$x =$  \_\_\_\_\_  $\angle EFG =$  \_\_\_\_\_  $\angle GFH =$  \_\_\_\_\_

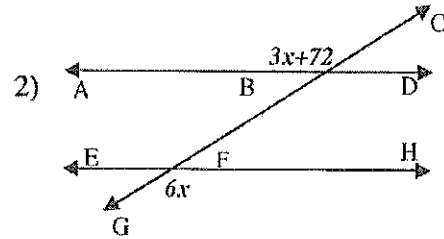
**FINDING UNKNOWN ANGLE MEASURES—MIXED ANGLES--#6**

**Directions:** Find the measure of each missing angle in the parallel lines and transversals below. Each pair of angles is either *supplementary* or *congruent* to each other. All you have to do is set up and solve the appropriate equation for each situation. Once you've solved for  $x$ , plug that value back into each expression to find the measure of each angle.



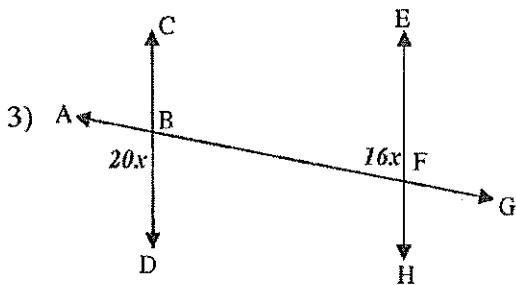
Equation: \_\_\_\_\_

$x =$  \_\_\_\_\_  $\angle HFC =$  \_\_\_\_\_  $\angle DBG =$  \_\_\_\_\_



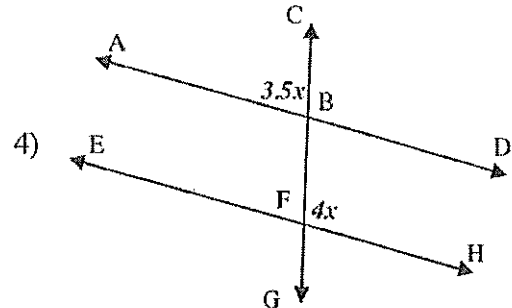
Equation: \_\_\_\_\_

$x =$  \_\_\_\_\_  $\angle ABC =$  \_\_\_\_\_  $\angle GFH =$  \_\_\_\_\_



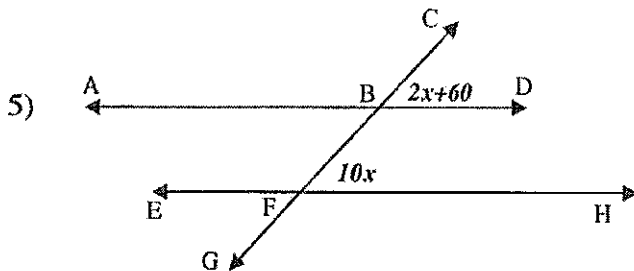
Equation: \_\_\_\_\_

$x =$  \_\_\_\_\_  $\angle ABD =$  \_\_\_\_\_  $\angle AFE =$  \_\_\_\_\_



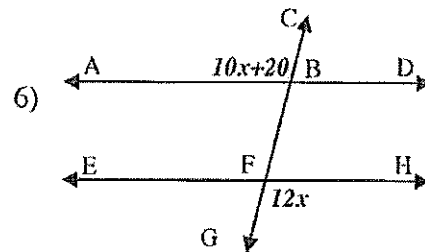
Equation: \_\_\_\_\_

$x =$  \_\_\_\_\_  $\angle CBA =$  \_\_\_\_\_  $\angle CFH =$  \_\_\_\_\_



Equation: \_\_\_\_\_

$x =$  \_\_\_\_\_  $\angle CFH =$  \_\_\_\_\_  $\angle CBD =$  \_\_\_\_\_



Equation: \_\_\_\_\_

$x =$  \_\_\_\_\_  $\angle ABC =$  \_\_\_\_\_  $\angle GFH =$  \_\_\_\_\_