Name: _____ Date: _____

Angles Homework

The following ∠1 and ∠2 are complementary angles. State the numerical value of x.

1. m∠1 = 2x, m∠2 = 3x	2. m∠1 = x, m∠2 = x + 20

The following ∠3 and ∠4 are supplementary angles. State the numerical value of y.

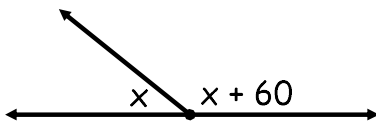| 3. m∠3 = 2y, m∠4 = 3y – 15	4. m∠3 = y + 10, m∠4 = 3y – 10

Solve.

_____ 5. The measure of an angle is 30 more than its complement. Find the measure
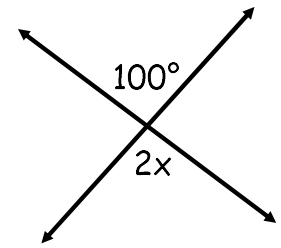_____   of the angle and its complement.

_____ 6. The measure of an angle is 20 less than the measure of its supplement.
_____   Find the measure of the angle, the measure of its supplement, and the
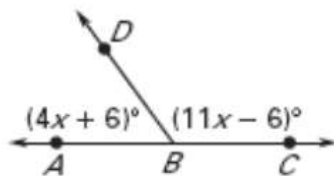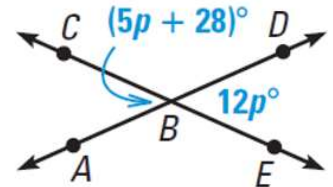   measure of its complement.

Solve for x.

_____ 7.

x $x + 60$

_____ 8.

100°

2x

_____ 9. $x =$ _____
m∠ ABD = _____
m∠ DBC = _____

D

$(4x + 6)°$ $(11x − 6)°$
A   B   C

_____ 10. $x =$ _____
m∠ ABC = _____
m∠ DBE = _____

C $(5p + 28)°$ D

$12p°$
B

A   E

Challenge: Find all the missing angles given m∠1 = 90°, m∠2 = 34°, and m∠6 = 137°.

m∠3 = _____

m∠4 = _____

m∠5 = _____

m∠7 = _____

m∠8 = _____

1 3 5 2
4

7
8   6