## Answer Key for 2-1 worksheet

- 1) If 2x 8 = 26, then (X = 17)
- 2) If it is raining, then

the grass is wet

3) If a number is divisible by 10, then it is divisible by 5 (True)  $\,$ 

# Inverse:

If a number is not divisible by 10, then it is not divisible by 5 (False)

## Converse:

If a number is divisible by 5, then it is divisible by 10 (False)

### Contra-positive:

If a number is not divisible by 5, then it is not divisible by 10 (True)

4) If  $m < 1 = 135^{\circ}$ , then m < 1 is obtuse (True)

### Converse:

If m < 1 is obtuse, then  $m < 1 = 135^{\circ}$  (False)

- 5) answers vary ex: x = -10
- 6) F• E•

### Answer Key for Lesson 2-2 Worksheet

- 1) addition property
- 2) division property
- 3) multiplication property
- 4) subtraction property
- 5) distributive property
- 6) transitive property
- 7) symmetric property

8) distributive property addition property subtraction property division property

### Answer Key for Lesson 2-3 Worksheet

- 1) Definition of a midpoint
- 2) Definition of an < bisector
- 3) Definition of an < bisector
- 4) Definition of a linear pair
- 5) Definition of a midpoint
- 6) Midpoint theorem
- 7) Angle addition postulate
- 8) Segment addition postulate
- 9) 75°
- 10) 110°

- 11) 52°
- 12) original < 42° bisection two 21° <'s
- 13) a) 12
  - b) 28
  - c) 6
  - d) 22

### Answer key for practice worksheet 2-4:

- 1) comp. =  $17.5^{\circ}$  supp. =  $107.5^{\circ}$
- 2) comp. = 90 2y supp. = 180 2y
- 3) comp. = 45° each supp. = 90° each
- 4) < AFD 5) < AFE & < EFD 6) < AFB & < AFD
- 7) < BFC & < DFC or < EFD & < EFB 8) < BFC & < EFD
- 11) 155° 9) < EFB & < DFC 10) 35° 12) 25°
- 13) 120° 14) 60° 15) 85° 16) x = 25
- 17) x = 47 and y = 7518)  $x = 29^{\circ}$  and comp = 61°
- 19)  $x = 36^{\circ}$  and supp. = 144°

# Answer key for practice worksheet 2-4 part II:

- 3)  $29^{\circ}$  comp. =  $61^{\circ}$ 1) 60° 2) 36°
- 4) 120° 5) 56° supp. = 124°
- 6)  $72^{\circ}$  supp =  $108^{\circ}$  comp =  $18^{\circ}$
- 7) 3 8) 5

# Answer Key for 2-5 Practice PDF Assignment

- 1)d = 49° e = 131° f = 49°  $1) \times = 15$
- 3) i = 129° j = 112° 2) x = 135
- 4) k = 90° l = 116° m = 64° n = 86° 3) x = 15
- 5)  $o = 13^{\circ} p = 50^{\circ} q = 91^{\circ}$ 4) x = 40
- 6)  $a = 120^{\circ} b = 60^{\circ} c = 140^{\circ}$ 5) x = 42
- 8) t = 29° u = 29° 6) x = 16
- 9)  $v = 39^{\circ} w = 59^{\circ} x = 121^{\circ}$
- 7) x = 3310)  $y = 59^{\circ} z = 93^{\circ}$ 8) x = 13
- 11)  $a = 42^{\circ} b = 48^{\circ} c = 132^{\circ}$ 9) x = 23
- 12)  $a = 60^{\circ} b = 50^{\circ} c = 80^{\circ} d = 100^{\circ}$  $10) \times = 12$
- 2)  $h = 67^{\circ} g = 23^{\circ}$  $11) \times = 11$
- 7)  $r = 79^{\circ} s = 63^{\circ}$ 12) x = 2