Missing Angles: Solve for x.

1.

$(10x + 1)°$ $(9x - 11)°$

2.

$(4x + 24)°$ $(7x + 3)°$

3.

89° $(5x - 6)°$ 57°

4.

∠ABC measures 82°

$7x+2$

5.

60° $x°$ $(2x + 4)°$

6.

$(14x + 6)°$ 52°
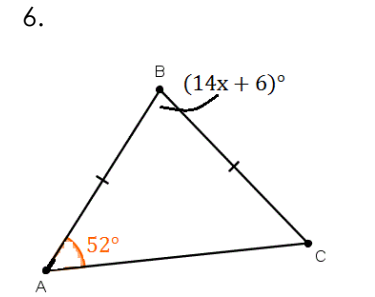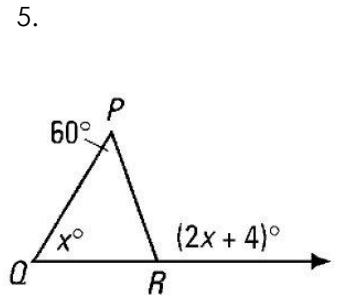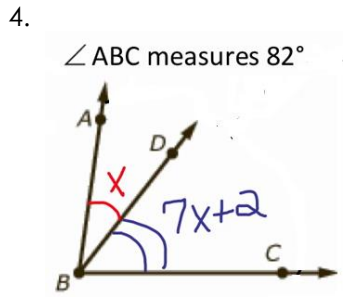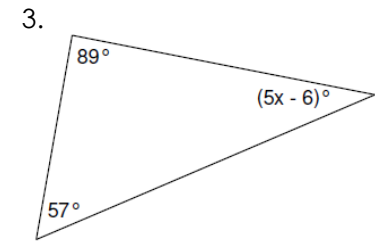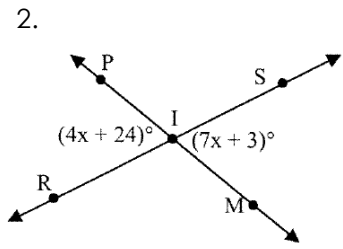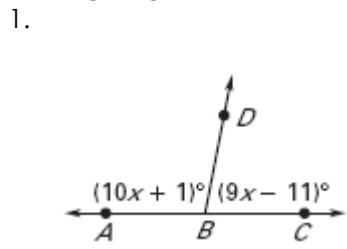
7.   ∠1 and ∠2 are complementary. Solve for x and the measure of both angles.

∠1 = 12x + 4
∠2 = 9x + 2

8.   The measure of one angle is 38 less than the measure of its supplement.
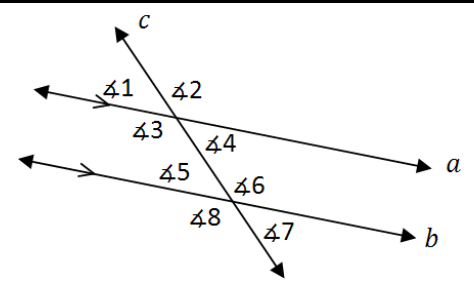   Find the measure of each angle.

9.   One of two supplementary angles is 123° less than twice its supplement. Find the measure of both
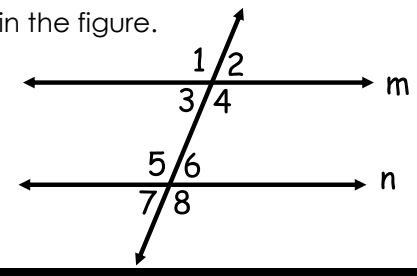   angles.

Parallel Lines:
Name the angles listed and the special property.

10. ∠1 and ∠5 _____

11. ∠4 and ∠6 _____

12. ∠2 and ∠8 _____

13. ∠4 and ∠5 _____

14. Given m||n and m∠8, find the measures of all the numbered angles in the figure.

m∠8 = 112°

m∠1 = _____   m∠2 = _____

m∠3 = _____   m∠4 = _____

m∠5 = _____   m∠6 = _____   m∠7 = _____

Solve for x.

15.

$(3x - 50)°$ $(2x - 5)°$

16.

$(6x + 7)°$ $(3x + 38)°$
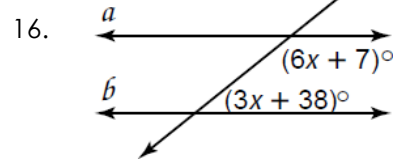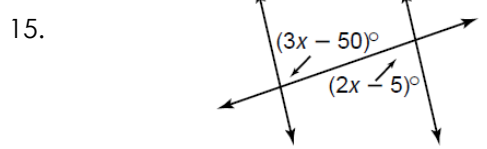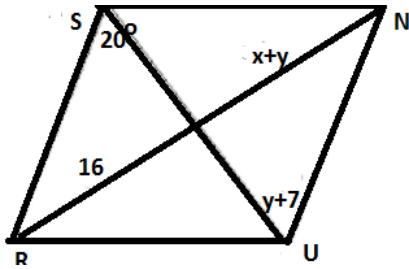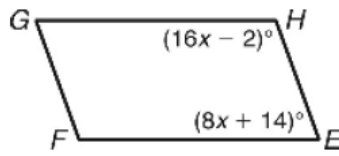
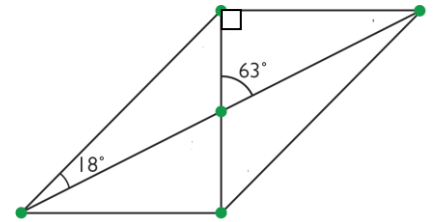Find the missing variable for the following parallelograms.

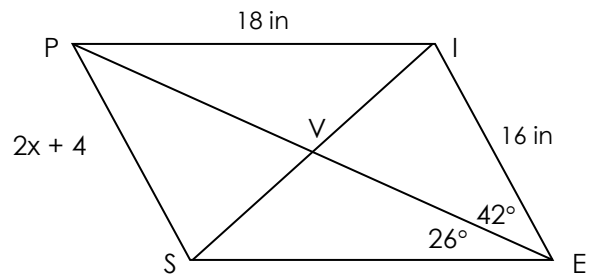3. Find x and y.　　　　　　　　　　4. Find x.　　　　　　　　　　5. Find the missing angles.

Refer to parallelogram PIES below.

6. $x =$ _____

7. $m\angle PIE =$ _____

8. $m\angle IPS =$ _____

9. $m\angle SPV =$ _____

10. If $PV = 20$, then $PE =$ _____

Fill in the properties of the Quadrilateral Flow Chart Below.

Parallelogram
- _____
- _____
- _____
- _____
- _____

Rhombus
- **ALL** of the properties of a parallelogram **PLUS**
- _____
- _____
- _____

Rectangle
- **ALL** of the properties of a parallelogram **PLUS**
- _____
- _____

Square
- **ALL** of the properties listed above

Other Quadrilaterals

Kite
- _____
- _____

Trapezoid
- _____

Isosceles Trapezoid
- _____