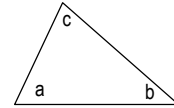| Geometry Lomac 2015-2016	Date 10/6 due 10/7	Angles: Triangles day 1 2.4L

Name _____ **Per**_____

LO: I can identify **angle relationships** involving triangles and use the relationships to solve for unknown values.

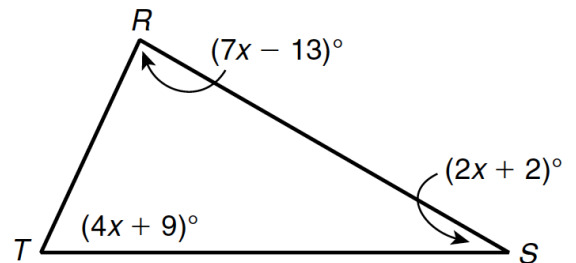☐ **DO NOW**   On the back of this packet

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☐ (1)   **Need to Know:**

The sum of the angles in a triangle is _____
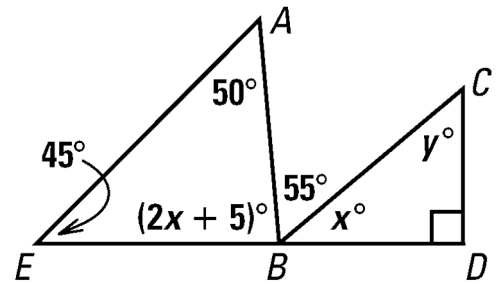
$a + b + c =$ _____

☐ (2)   **Angles: Using the sum of the angles in a triangle to write and solve equations**

(a) Write an equation and solve it to find the measure of *x*.

$8x + 2$

$70°$ $60°$
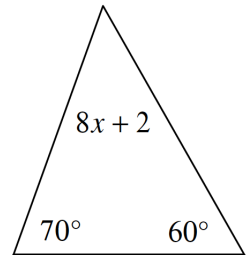
(b) Write an equation and find the measure of angle R

R

$(7x - 13)°$
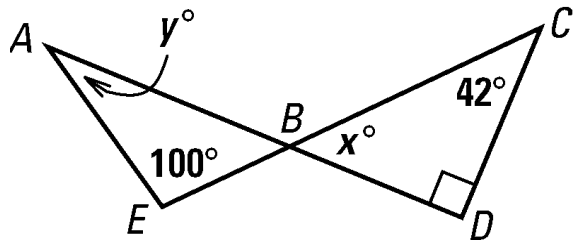
$(2x + 2)°$

$(4x + 9)°$

T   S

(3) **Angles: Using the sum of the angles in a triangle to write and solve equations**

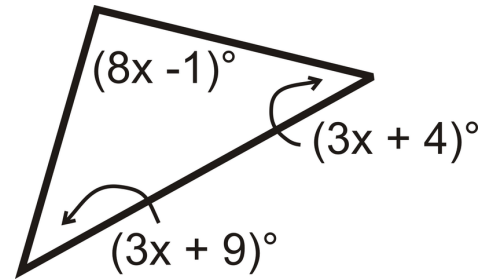(a) Write 1 or more equations and solve to find the measure of x and y.

(a) Write 1 or more equations and solve to find the measure of x and y.
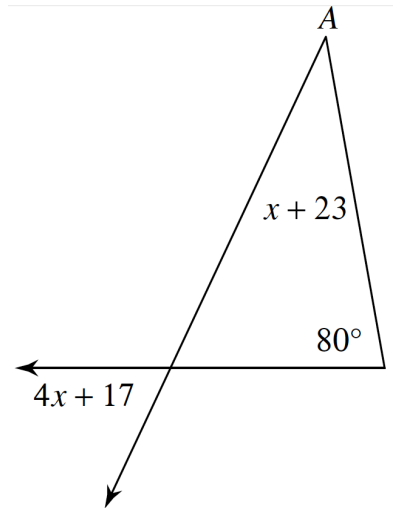
☐ (2)   **Angles: Identifying angle relationships**
cont.
(a) Write an equation and solve it to find the measure of x. Name any angle relationships you use.

$(8x -1)°$

$(3x + 4)°$

$(3x + 9)°$

(b) Use any angle relationships you know to write 1 or more equations to find the value of x.
   Name any angle relationships you use.
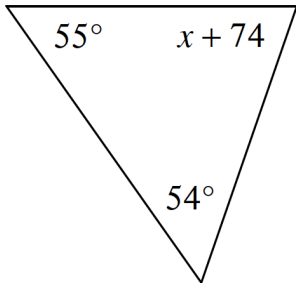
A

$x + 23$

$80°$

$4x + 17$

☐ (3) **Exit Ticket**
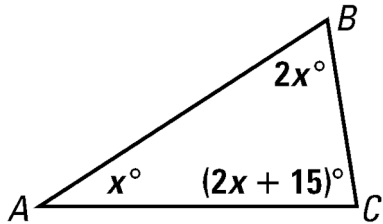
ON THE LAST PAGE

☐ (4) **Homework**

pen or
pencil

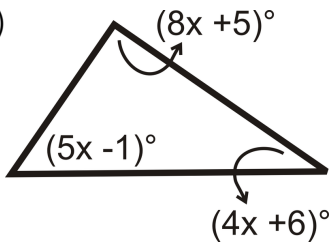For each diagram, write an equation and solve it to find the measure of *x*. Name any angle relationships you use.
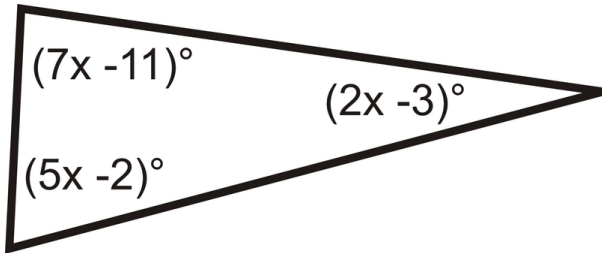
(a)

55° $x + 74$

54°

(b)

B

$2x°$

$x°$ $(2x + 15)°$

A   *C*

(c)

$(8x +5)°$

$(5x -1)°$

$(4x +6)°$

Exit Ticket   **Name**_____ **Date** _____ _____ **Per**_ _____   **2.4L**

(1) The LO (Learning Outcomes) are written below your name on the front of this packet. Demonstrate your achievement of these outcomes by doing the following:

Name the angle relationship (2) Write an equation (3) solve it for x

$(7x -11)°$

$(2x -3)°$

$(5x -2)°$

DO NOW   **Name**_____ **Date** _____ **Per**_____   **2.4L**

(1) Solving progress: Solve one of the two problems below.

(a) $\dfrac{2x-3}{5}=9$ (b) $18-12y=-22-7y$

(2) Translation to algebra progress. Write an algebraic statement to represent this situation. Be sure to write a "Let" statement to define any variables. Use BUCKS.

Five years ago, John's age was half of the age he will be in 8 years. How old is he now?