# TOPIC 3-2: MORE PARALLEL LINES

**We learned several relationships that are formed when parallel lines are cut by a transversal.**

| Which types of angle pairs were congruent? | Which types of angle pairs were supplementary? |
|---|---|
| 1._____ | 1._____ |
| 2._____ | 2._____ |
| 3._____ | |
| 4._____ | |

## EXAMPLE 1
**Using the figure below, identify each angle pair, and tell whether they are congruent or supplementary.**
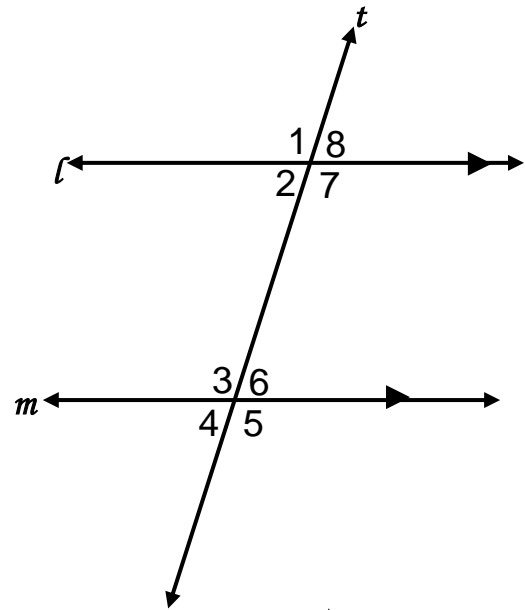
**a)** ∠1 & ∠5

   **Type:**

   **Congruent  or  Supplementary?**

**b)** ∠2 & ∠3

   **Type:**

   **Congruent  or  Supplementary?**

## EXAMPLE 2
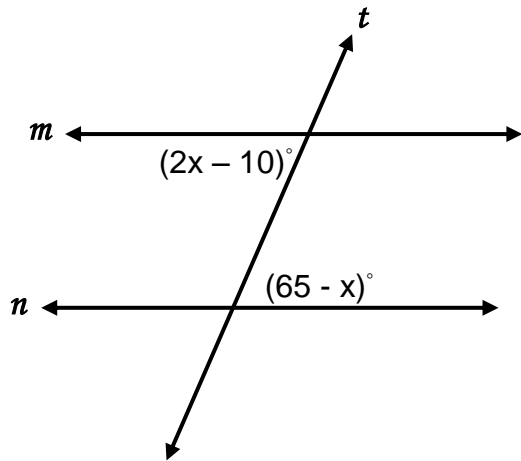**In the figure below, $l \parallel m$.  Find the measure of each angle.**

**a)  m∠3 = 115°, find m∠5.**

**b)  m∠1 = 130°, find m∠7.**

**c)  m∠8 = 47°, find m∠3.**

1
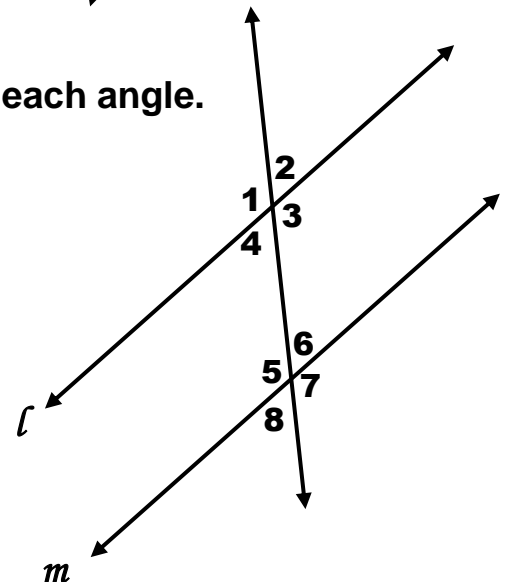
**Example 3   Find the value of x.**

*t*

*m* $(2x - 10)°$

*n* $(65 - x)°$

**Example 4   Find the value of x.**

*t*

*m* $(x + 80)°$

*n* $(5x)°$
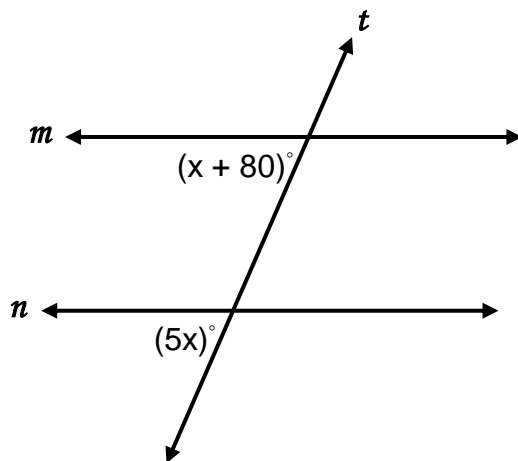
## More Practice at the following website………..

## In class practice answers:

| | |
|---|---|
| **#1.** | **#2.** |
| **#3.** | **#4.** |
| **#5.** | **#6.** |