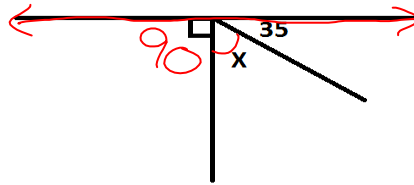


CODE RED – DO NOW

Complete Problems #1-3

1. Find the measure of the missing angle.

$$\underline{x = 55}$$



$$\begin{array}{r} 90 \\ + 35 \\ \hline 125 \end{array} \qquad \begin{array}{r} 180 \\ - 125 \\ \hline 55 \end{array}$$

2. Define the words: interior and exterior
3. Let p = Today is Monday, and let q = The carnival is in town.

Write the statement that represents: $\sim q \wedge p$

The carnival is not in town and today is Monday.

SEMESTER EXAM BOOT CAMP: G.2 REVIEW

SOL G.2

Learning Target: By the end of class today, I will be able to use the relationships between angles formed by two lines cut by a transversal to verify their parallelism, using algebraic and coordinate methods as well as deductive proofs to solve real-world problems at an accuracy of 80%, answering 4 out of 5 questions correctly on an exit ticket.

Essential Question: How can I use properties of parallel lines to work towards the solution to a problem?

TODAY'S AGENDA

- ✓DO NOW
- ✓Homework Review
- ✓G.2 Angle Relationships Review
- ✓KAHOOT!
- ✓Exit Ticket

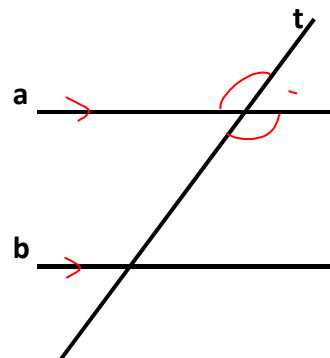
CODE YELLOW

Vocabulary

Transversal – any line that connects or crosses at least two other lines.

Parallel lines – two lines (on the same plane) that never intersect

<http://www.mathopenref.com/transversal.html>



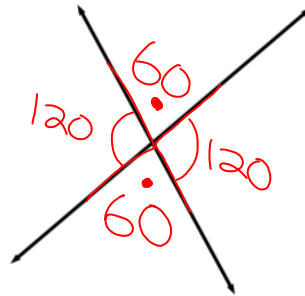
CODE YELLOW

Angle Relationships

VERTICAL ANGLES

Two angles **across** from each other on intersecting lines. They are always **congruent!**

Example:



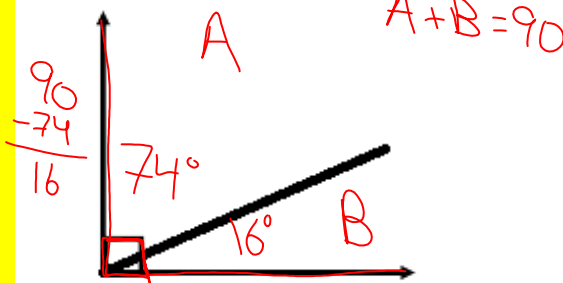
CODE YELLOW

Angle Relationships

COMPLEMENTARY ANGLES

Any two angles whose sum is 90°

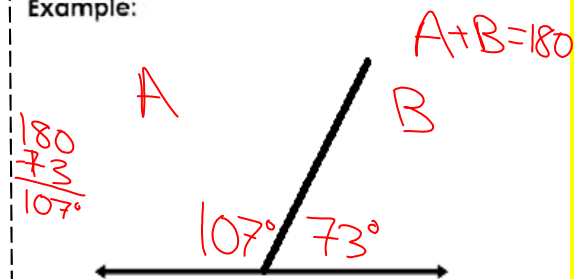
Example:



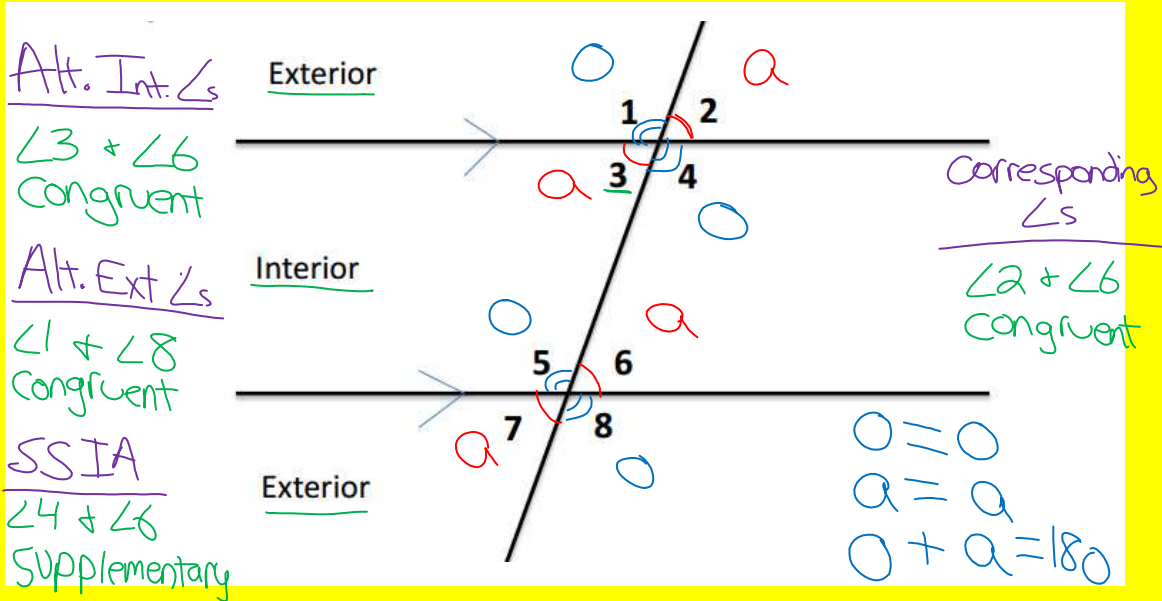
SUPPLEMENTARY ANGLES

Any two angles whose sum is 180°

Example:



CODE YELLOW



CODE YELLOW

There are 4 WAYS to prove that two lines are parallel:

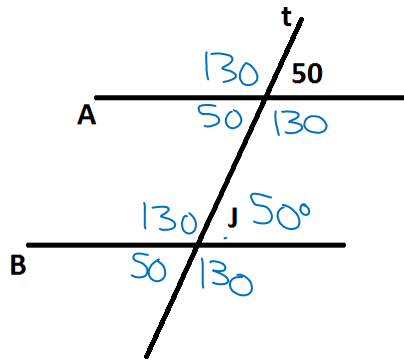
1. Corresponding angles are **CONGRUENT**
2. Alternate Interior angles are **CONGRUENT**
3. Same Side Interior angles are **SUPPLEMENTARY**
4. Alternate Exterior angles are **CONGRUENT**

CODE YELLOW

Corresponding angles are **CONGRUENT**

What angle measure would makes Lines A and B parallel?

$$J = 50^\circ$$

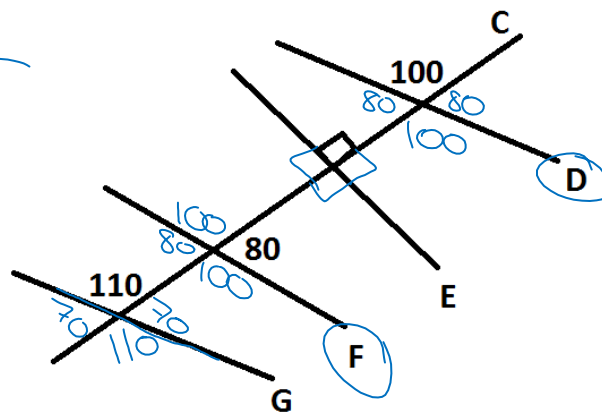


CODE YELLOW

Alternate Interior angles are **CONGRUENT**

Which lines are parallel?

$$D \neq F$$

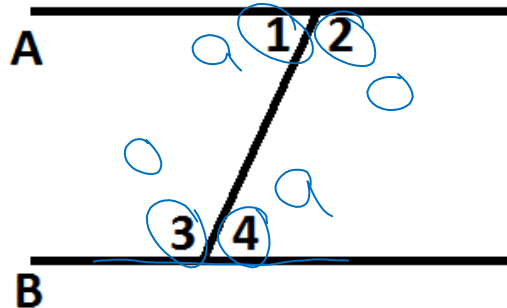


CODE YELLOW

Same Side Interior angles are **SUPPLEMENTARY**

Which pair of angles must be supplementary in order for lines A and B to be parallel? *add to 180*

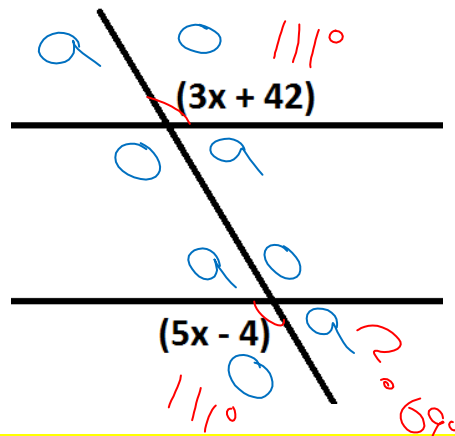
- $a = a$
~~a) 1 & 4~~
 $o = o$
~~b) 3 & 2~~
 $a + o = 180$
 c) 4 & 3
 $o + a = 180$
 d) 2 & 4



CODE YELLOW

Alternate Exterior angles are **CONGRUENT**

What value of x would make the lines parallel?



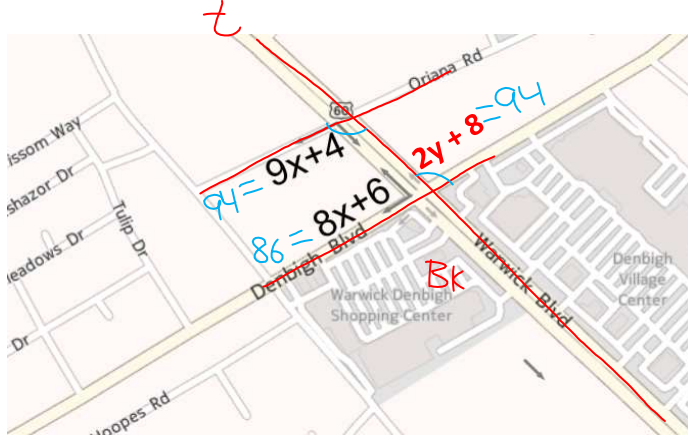
$$o = o$$

$$3x + 42 = 5x - 4$$

$$x = 23$$

CODE BLUE

What value of X would make Denbigh and Oriana parallel?
Find y .



$$9x + 4 + 8x + 6 = 180$$

$$17x + 10 = 180$$

$$x = 10$$

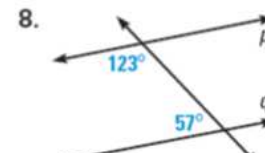
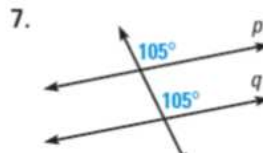
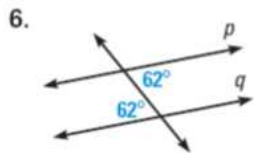
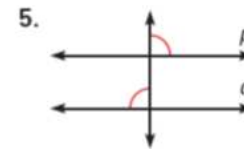
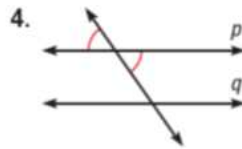
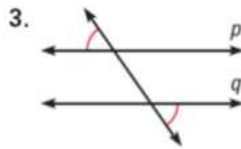
$$2y + 8 = 94$$

$$\begin{array}{r} 2y + 8 = 94 \\ -8 \quad -8 \\ \hline 2y = 86 \end{array}$$

$$y = 43$$

CODE GREEN

Can you prove that lines p and q are parallel? If so, describe how.



<https://play.kahoot.it/#/k/003a0613-5207-43c6-8637-6a2b4d6beab5>