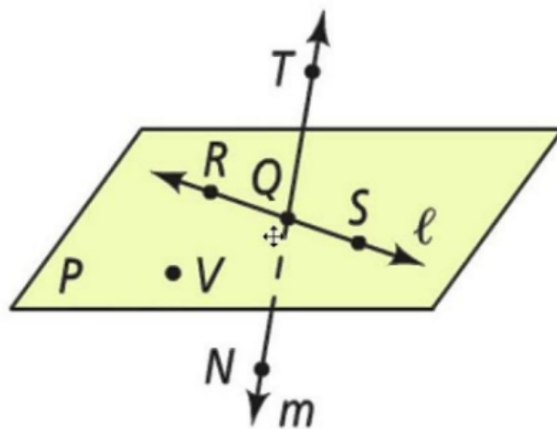
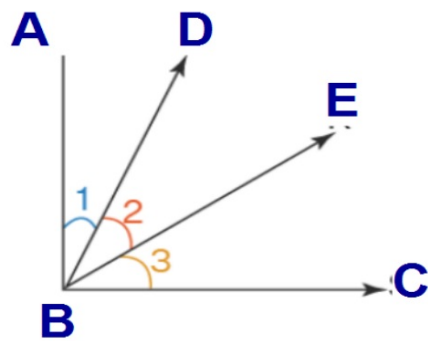


- 1.) Name this plane two different ways.  
Where do lines RS and TN intersect?  
Is line TN coplanar with line  $\ell$  ?



Are Points T Q and V collinear?  
Name Three points that are collinear.

2.)

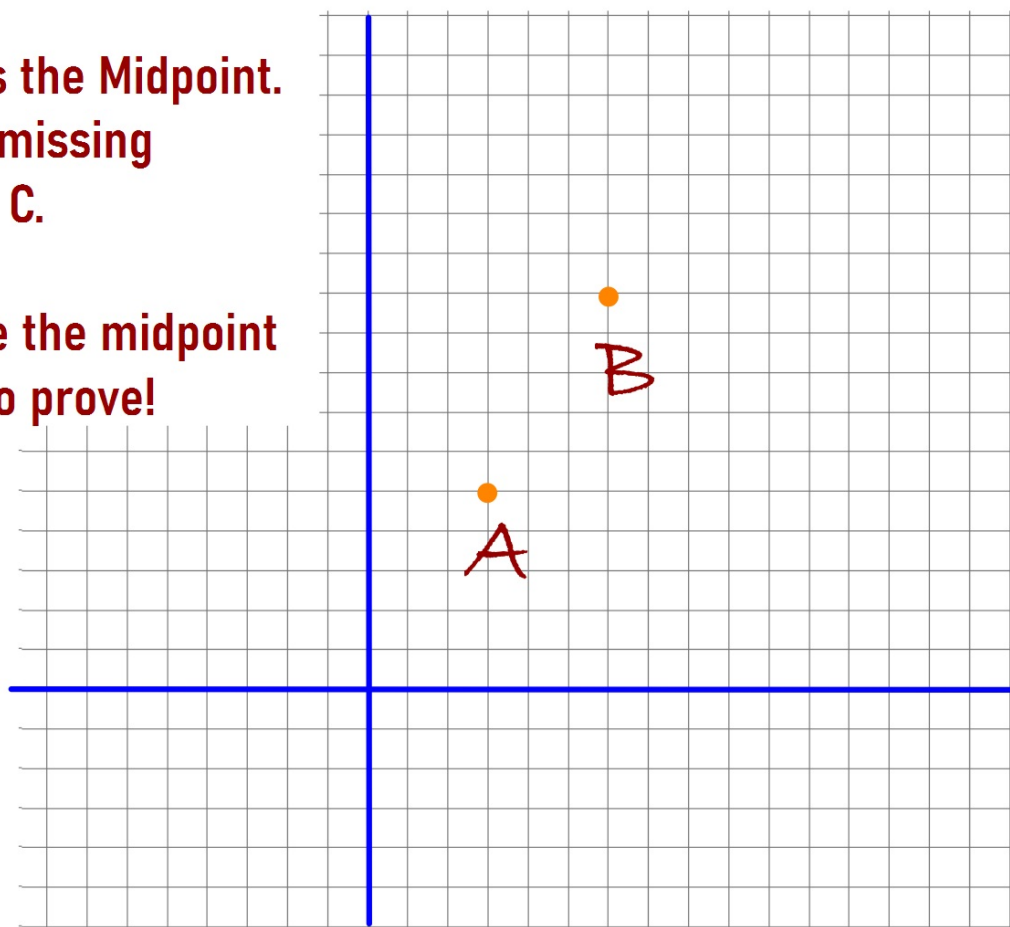


**Find the measure of angle ABD if you know that  $m\angle ABE=52$ ,  $m\angle DEC =75$ ,  $m\angle EBC = 30$**

Point A is the Endpoint  
and  
Point B is the Midpoint.  
Find the missing  
Endpoint C.

\*Also use the midpoint  
formula to prove!

3.)



**True or False:**

**All Vertical Angles are Congruent.**

**All Vertical Angles are Adjacent.**

**All Vertical Angles are Complementary.**

**All Supplementary angles are Congruent.**

**All Supplementary angles are a Linear Pair.**

**All Supplementary angles are Adjacent.**

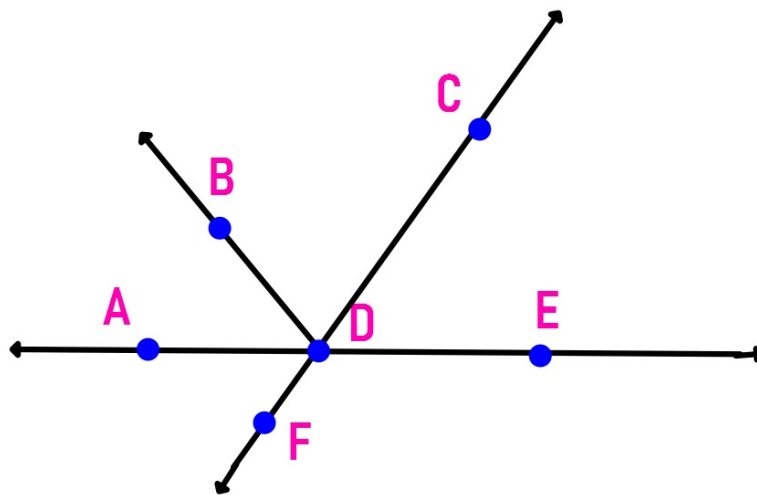
**All perpendicular Angles are right angles.**

**All perpendicular angles are congruent.**

**All perpendicular angles are Adjacent.**

4.)

If  $\overline{FC}$  bisects  $\angle ADC$  which angles are congruent?



**5.) Draw a line segment where Q is between Points L and J on a line segment where all points are collinear.**

**Label the following lengths on your line segment:**

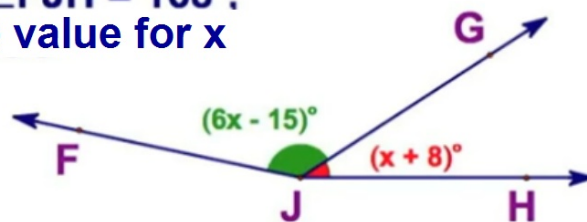
$$\text{LQ} = x+2, \quad \text{QJ} = 3x-9, \quad \text{LJ} = 6x-21$$

**Solve for all the lengths (LQ, QJ, and LJ)**

**6.) Given:**  $4(5x + 7) - 3x = 12x - 27$   
**Prove:**  $x = -11$

| Statements                     | Reasons                 |
|--------------------------------|-------------------------|
| 1. $4(5x + 7) - 3x = 12x - 27$ | 1.                      |
| 2. $20x + 28 - 3x = 12x - 27$  | 2.                      |
| 3.                             | 3. Combine like terms   |
| 4.                             | 4. Subtraction Property |
| 5.                             | 5.                      |
| 6. $x = -11$                   | 6.                      |

- 7.) Given  $m\angle FJH = 168^\circ$ .  
Prove the value for  $x$



| Statements                                | Reasons |
|-------------------------------------------|---------|
| $m\angle FJH = 168$                       |         |
| $m\angle FJG + m\angle GJH = m\angle FJH$ |         |
| $(6x - 15) + (x + 8) = 168$               |         |
| $7x - 7 = 168$                            |         |
| $7x = 175$                                |         |
| $x = 25$                                  |         |

**8.**

*If two points are on the same line, then they are collinear.*

Converse :

Inverse :

Contrapositive :



**Which is the hypothesis and the conclusion?**

**Vocabulary from Modules 1-3 & all Notes (content library from Teams - Class Notebook)**

**Valid (true)**

**Counterexample (non-example)**

**Inverse (opposite)**

**Hypothesis (beginning)**

**Conclusion (ending)**

**linear pair (line - 180 degrees -supplementary)**

**adjacent (angles next to each other \*any degrees)**

**right angles/perpendicular (90 degrees)**

**vertical angles**

**collinear (same line)**

**coplaner (same plane)**

**congruent (equal)**

**bisector (cuts in half - congruent parts of a line**

**segment/angle) \*Midpoint/Angle Bisector**

**Know your properties!**

**\*STUDY FROM CLASS WEBSITE, TEAMS -**

**CLASS NOTEBOOK VOCAB/NOTES CONTENT LIBRARY**