Warmup 2/(# of touchdowns the Eagles scored yesterday) Created by Mr. Lischwe

Make sure you have a SMALL whiteboard, marker, and eraser inside your desk. No big whiteboards.

Solve these <u>analogies</u>. Fill in the blanks so that both pairs of items have the same relationship.

1. Basketball: orange   ::   golf ball: _____
2. Blake Shelton: country   ::   Drake: _____
3. Solid:melt   ::   liquid: _____
4. Skeptical:belief   ::   Liar:_____
5. 16:4   ::   36: ___
6. Addition:multiplication   ::   multiplication:_____

Exponents & Scientific Notation Test

- YOU CAN RETAKE INDIVIDUAL TASKS! (Don't miss this groundbreaking opportunity!)
- Example of a great answer for Task 6 #1:

- Great Answers for Task 6 #2:

PLAN FOR THIS WEEK:

- Today: Basics of Angles
- Tuesday: Angles formed by Parallel Lines
- Wednesday: Angles of Triangles
- Thursday: Review
- Friday: Angles Quiz!!!

Textbook Volume 2!!!

- Keep your volume 1 somewhere handy – we'll go back to it later.

- Anytime I tell you to bring your textbook now, it should be **VOLUME 2.**

Table of Contents (2nd Semester)

Angle Basics 7
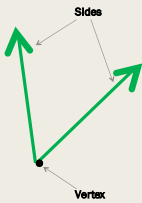
Objectives:
- Name angles
- Estimate angle measures
- Measure angles with a protractor
- Classify angles
- Find complementary and supplementary angles
- Find missing angle measures in an "X"

Brainstorm:
- What do we remember about angles???
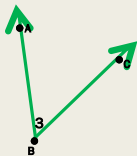

Parts of an angle

Sides

Vertex

Quick Question...
- How many angles are in this picture?
- How would I **name** each one?

---

4 ways to name this angle...

3

B

NAMING ANGLES
- Use 3 letters – the middle letter MUST be the vertex
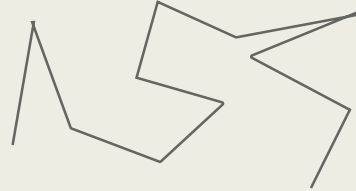- May use 1 letter ONLY IF there's only one angle at that vertex

---

Which angle is has a greater measure?

4 "Categories" of angles

- **Acute**: between 0 and 90 degrees
- **Right:** exactly 90 degrees
- **Obtuse:** between 90 and 180 degrees
- **Straight:** exactly 180 degrees

- **(if I were you, I would put a picture representing each type too)**

- By the way, an angle <u>over</u> 180 degrees is called a "reflex" angle

Classify Each Angle:

IMPORTANT GEOMETRY VOCAB

- **Two angles that have the same measure are called**

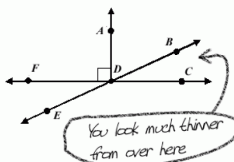# CONGRUENT.

- **Symbol:** ≅

- **Adjacent Angles**: Share a side and vertex

  1 2

- In the diagram, angles 1 and 2 are adjacent.

Complementary Angles

3. Name an angle complimentary to BDC:

You look much thinner from over here

- **Complementary Angles are two angles whose measures add up to 90º.**

- **Supplementary Angles are two angles whose measures add up to 180º.**

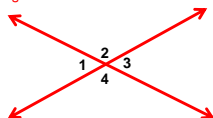- **(They don't have to be adjacent!!!)**

- What is the **complement** of a 50º angle?
- What is the **supplement** of a 50º angle?
- What is the **complement** of a 27º angle?
- What is the **supplement** of a 102º angle?
- What is the **supplement** of a 155.5º angle?
- What is the **complement** of a 45º angle?
- What is the **complement** of a 95º angle?

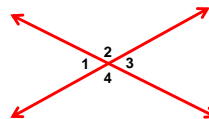## Find the missing angle measures:

z° (challenge)

x° 62°   54° y°

- **<u>Vertical Angles</u>**: Angles across from each other at the intersection of two straight lines.
  - They are **always** congruent!!!
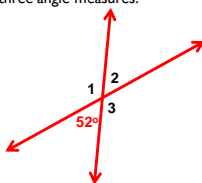
2
1   3
4

- ∠1 ≅ ∠3 and ∠2 ≅ ∠4

- Two angles that form a straight line will always be supplementary!

2
1   3
4

- $m\angle 1 + m\angle 2 = 180^o$

Example
- Find the other three angle measures.

1   2
3
52°

HOMEWORK
- Angle Basics Worksheet