Warmup 2/ **(Complement of an 85° angle)**

$\angle PSR$

1) **Give the name of a right angle from the diagram.** $\angle PST$

2) **Which angle is <u>supplementary</u> with** $\angle QSR$**?** $\angle QST$

3) **Name a pair of complementary angles.** $\angle PSQ + \angle QSR$
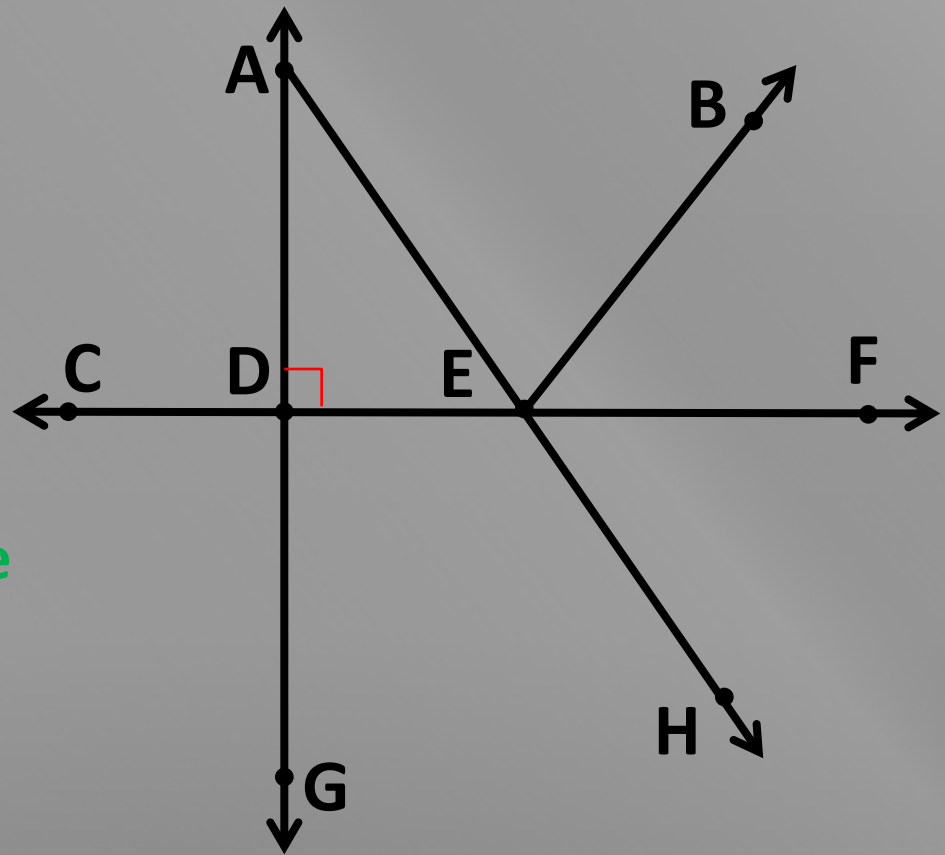
(more on the next slides)
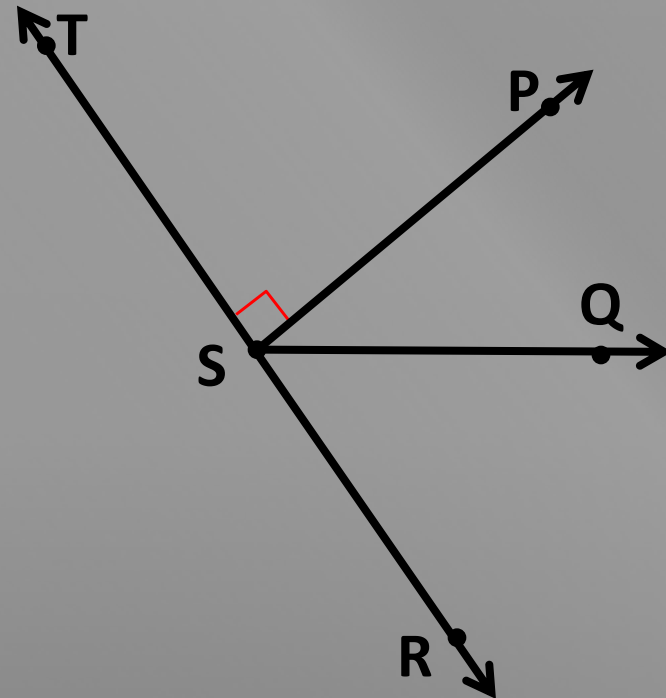
Warmup (continued)

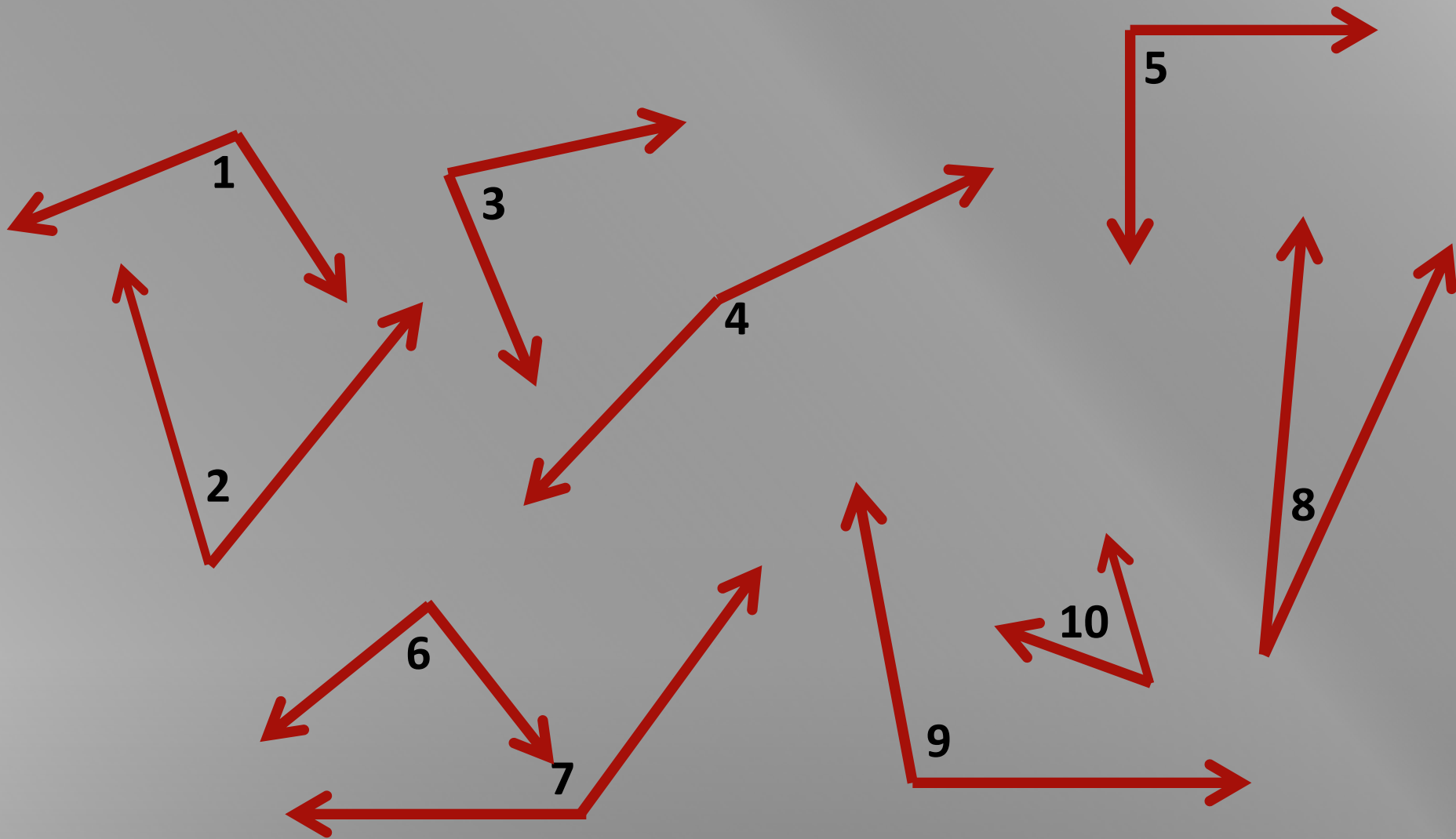4) What is the difference between $\angle AED$ and $\angle AEC$?

ANSWER: Nothing. They are the same angle.

In an angle, the "corner" is the ONLY part that matters. It doesn't matter how long the sides are.
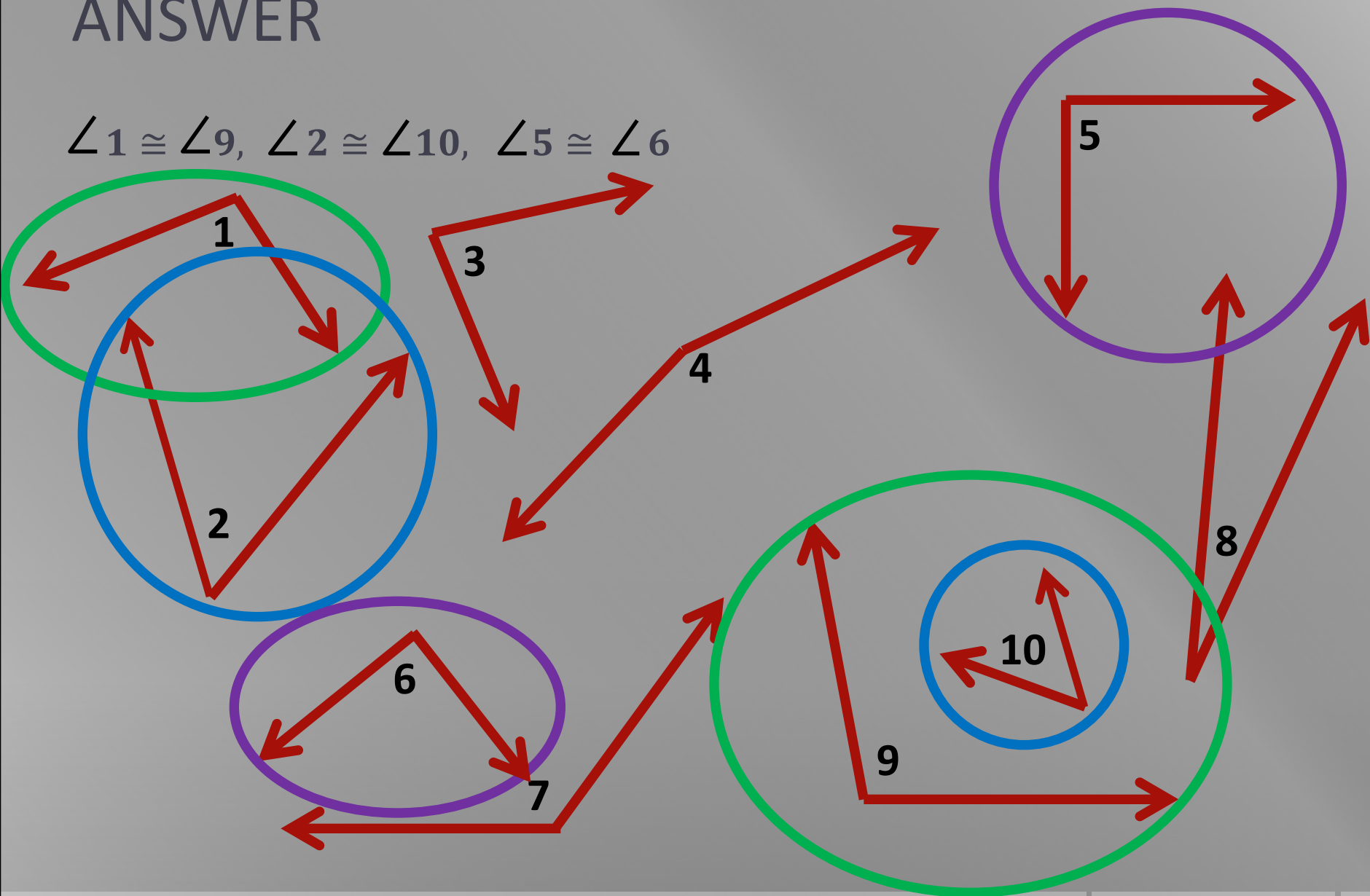
Warmup (continued)

5) How many pairs of congruent angles are there in this picture? Name them all!
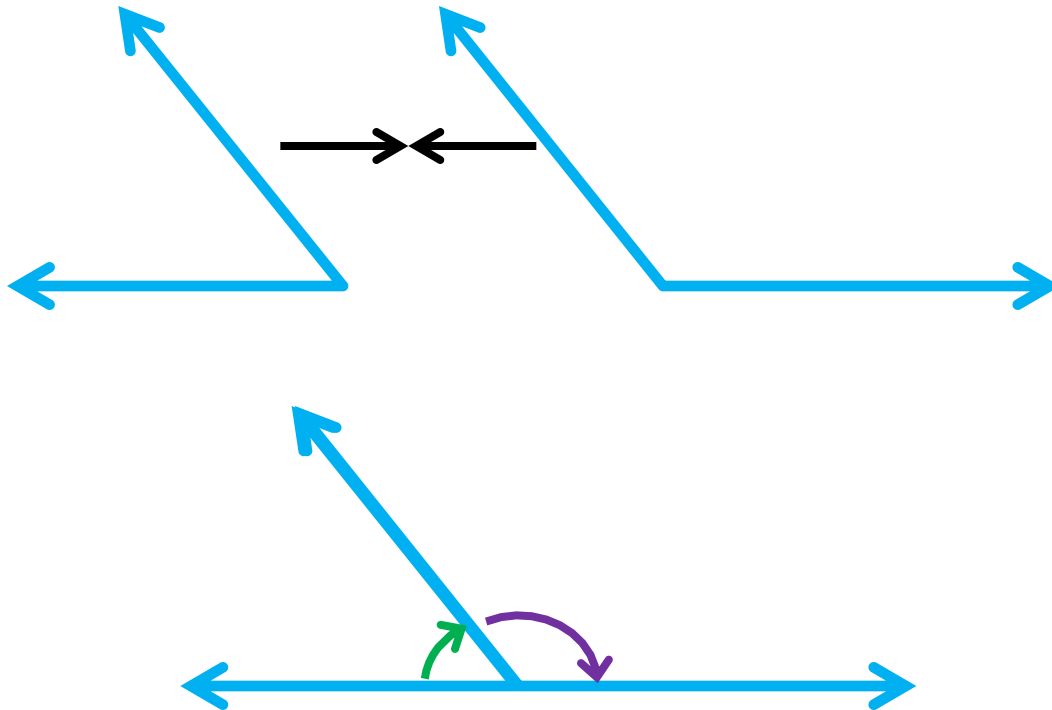
1

2

3

4

5

6

7

8

9

10

ANSWER

$\angle 1 \cong \angle 9, \ \angle 2 \cong \angle 10, \ \angle 5 \cong \angle 6$
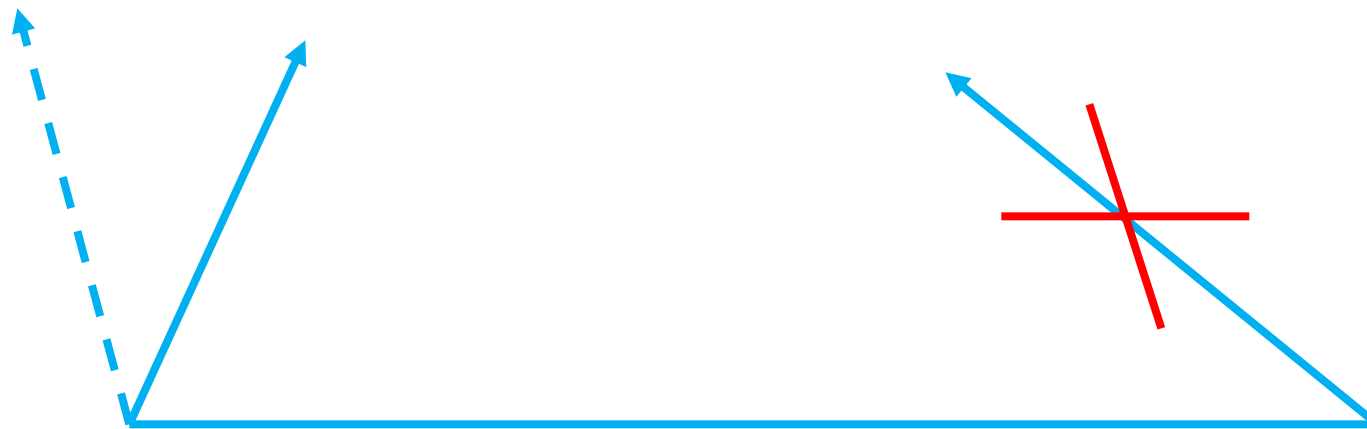
Supplementary Angles…

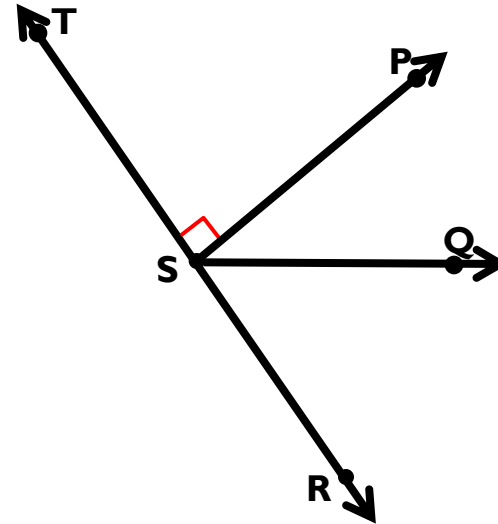These two angles put together equal a "half turn," which is 180°.

Common Error: "A straight line is 180º"

- These two angles DO NOT form a straight angle.
- If you put the vertices of the two angles together, you can see that it is not 180º.

Name an example of each of the following:

- A right angle
- An obtuse angle
- A pair of adjacent angles
- A pair of supplementary angles

Suppose the measure of angle PSQ is 40°.

Lazy way to say it (I am guilty of this sometimes):
   "Angle QSR is 50 degrees."

Better way to say it:
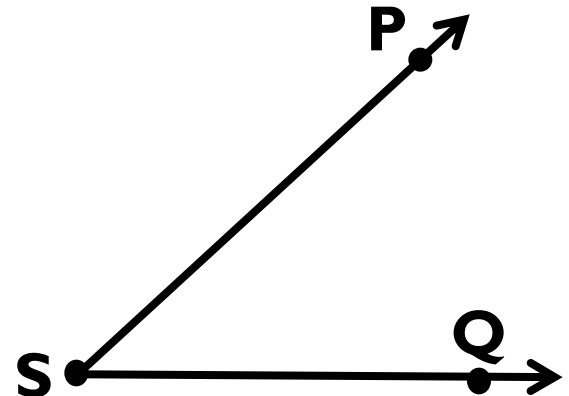   **"The measure of angle QSR is 50 degrees."**

Lazy way of writing it: $\angle QSR = 50^o$

Better way of writing it: $m\angle QSR = 50^o$

- **Name: Mr. Lischwe**
- **Classify: Teacher, male, etc.**
- **Measure: 5'3"**

- **Name:** $\angle PSQ$
- **Classify: Acute**
- **Measure:** $m\angle PSQ = 40^o$

Go over Exponents/Scientific Notation Test

▸ **May retake individual tasks (If you bombed a task, you really should. Don't be lazy.)**

answer as a single value.

Some clever "x⁶" problems:

$$\frac{d^7 x^7}{d^7 x^1} \qquad \frac{x^{-6}}{x^{-12}} \qquad \left(-x^3\right)^2 \qquad \frac{x^{162}}{x^{162}} \cdot x^6$$

$$y^2 \cdot y^{-2} \cdot x^6$$

$$\frac{1}{x^{-6}}$$ = hidden bonus; if you put this, I gave you +1/2 bonus point

$$z \; if \; z = y^2 \; and \; y = x^3 \qquad \frac{co^2 kie}{co^2 kie \cdot x^{-6}}$$

Task 5 (5 points)

Make up ten different exponent problems whose answer would be x^6.

$\frac{x^{10}}{x^4}$	$\frac{x^{11}}{x^5}$	$\frac{x^{12}}{x^6}$	$\frac{x^{13}}{x^7}$	$\frac{x^{14}}{x^8}$	$\frac{x^{15}}{x^9}$	$\frac{x^{16}}{x^{10}}$	$\frac{x^{17}}{x^{11}}$	$\frac{x^{18}}{x^{12}}$	$\frac{x^{19}}{x^{13}}$

Competition: Estimating Angle Measures

▸ You will have about ten seconds to estimate each angle measure.

▸ Do not hold up your estimates until I say "hold them up!"

▸ If I see you changing an answer AFTER you hold it up, you will spend the rest of the game in the hallway

▸ Closest estimate gets a point.

▸ If you get the estimate EXACT, you get two points. If you are one away, even if you're not the closest, you get one point.

▸ Top 3 will get a prize.

▸ **WHY ARE WE DOING THIS???** It is <u>very</u> important that you are able to reasonably estimate an angle measure. This will prevent you from making mistakes in this unit.

▸ Even if you are not getting points, if your estimates are consistently within ten degrees or so of the real thing, you're
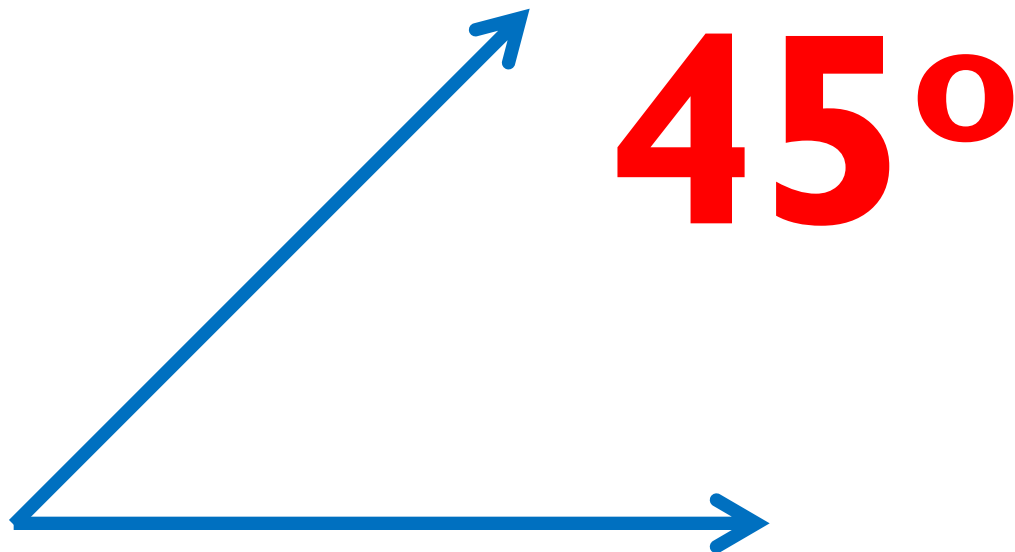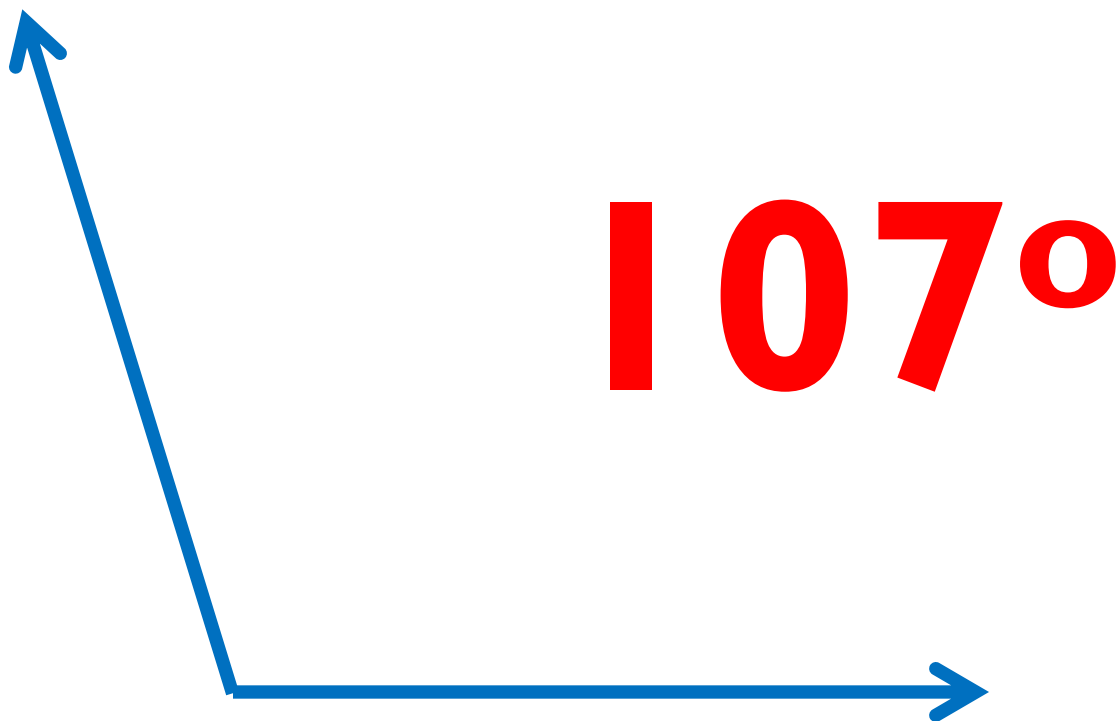▸ doing very well.

WHITEBOARDS!

▸ Estimate the angle measure:
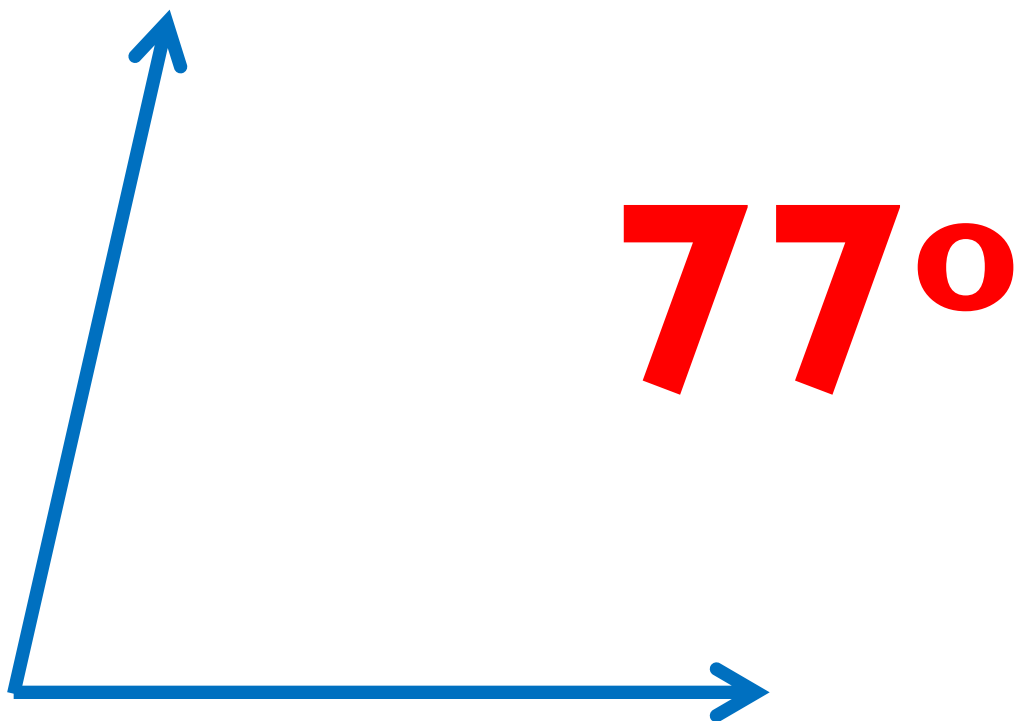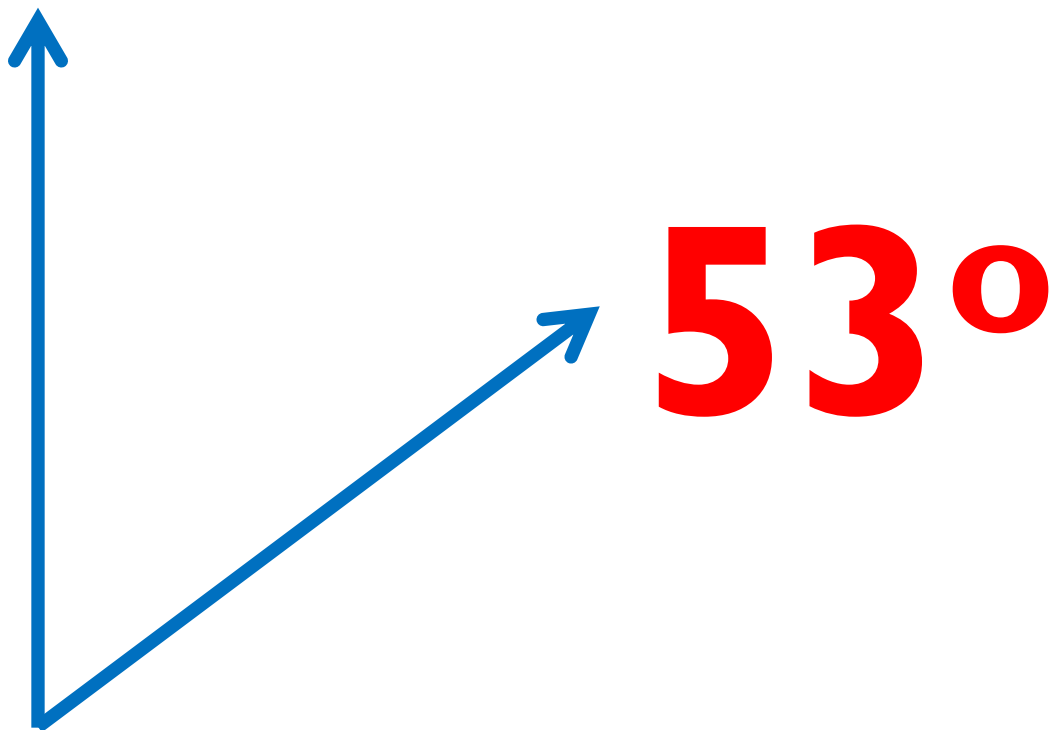
77º

WHITEBOARDS!

‣ Estimate the angle measure:

45º

WHITEBOARDS!

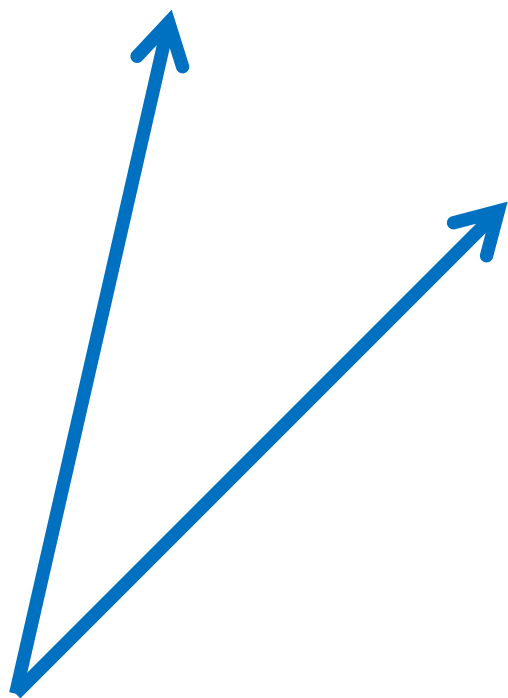▸ Estimate the angle measure:

107°

WHITEBOARDS!

▸ Estimate the angle measure:

53º

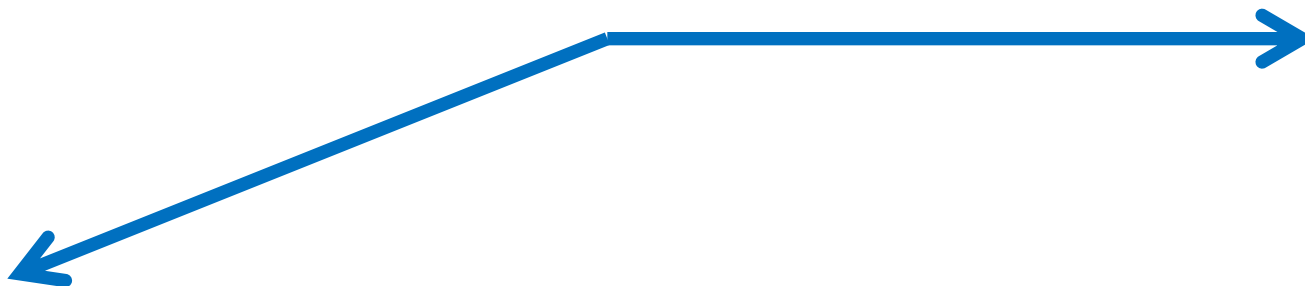# WHITEBOARDS!

‣ Estimate the angle measure:
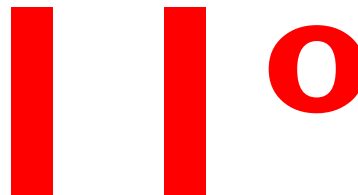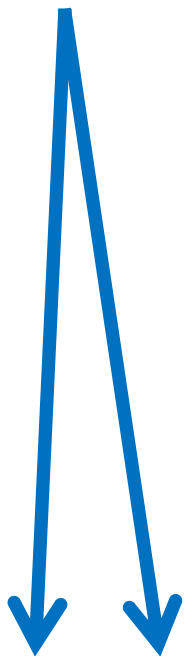
32º

WHITEBOARDS!

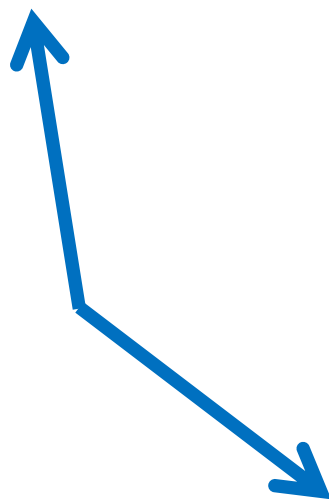▸ Estimate the angle measure:

158º

WHITEBOARDS!

‣ Estimate the angle measure:

11°

WHITEBOARDS!

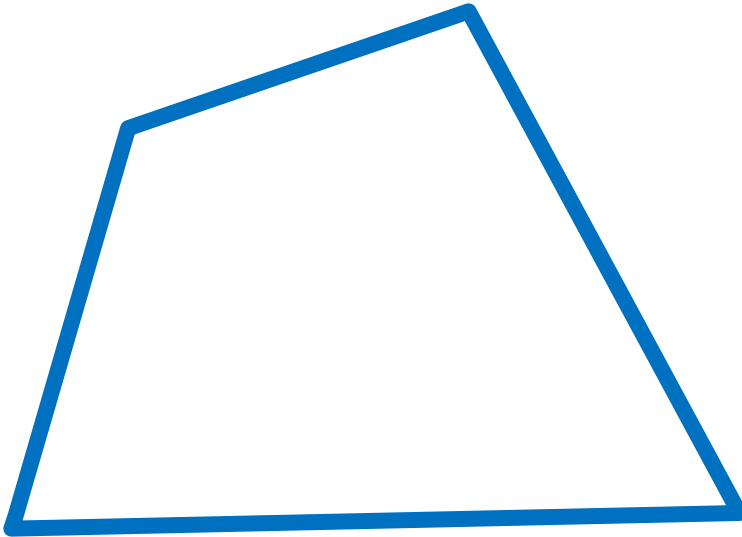‣ Estimate the angle measure:

135º

WHITEBOARDS!

- **BOTTOM LEFT angle:**
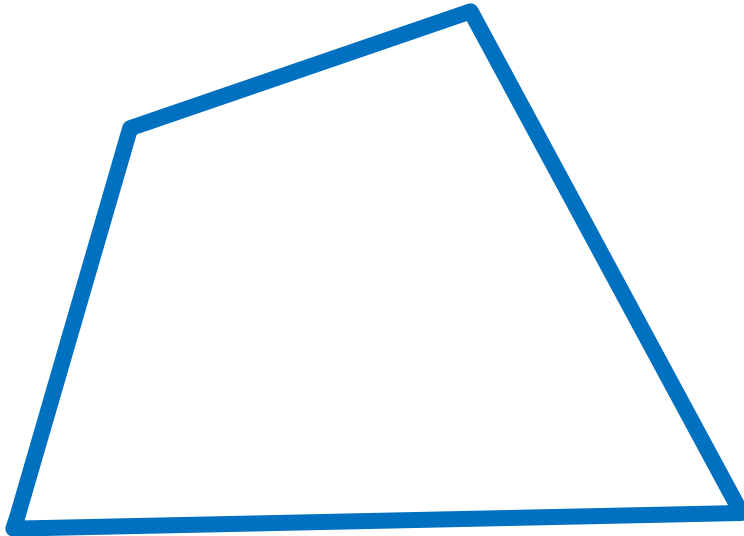
73°

WHITEBOARDS!

- **BOTTOM RIGHT** angle:

63º
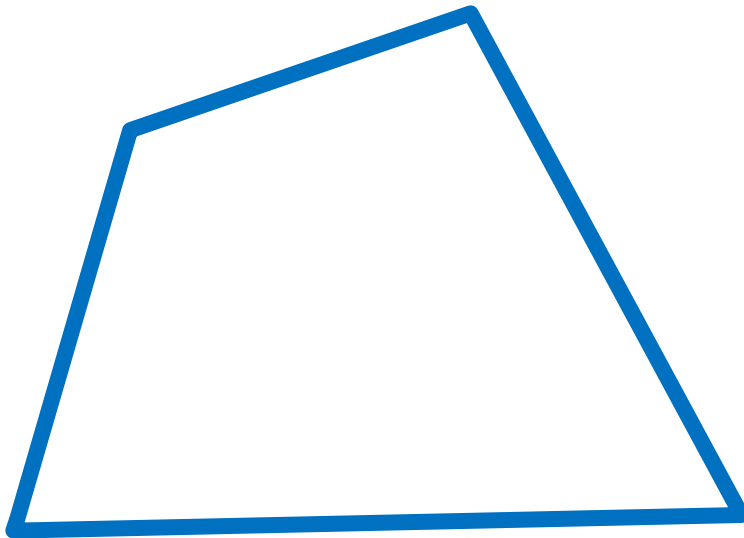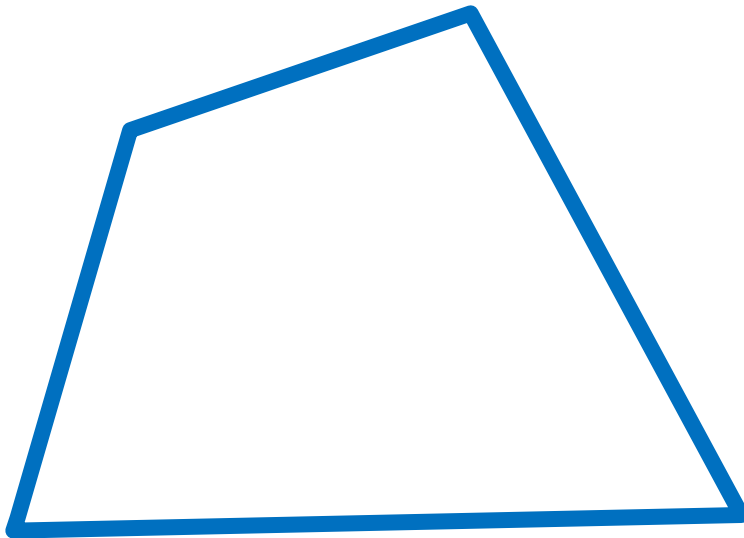
WHITEBOARDS!

‣ **TOP LEFT angle:**

126°

WHITEBOARDS!

‣ **TOP RIGHT angle:**

98º

PROTRACTOR/RULER RULES

- Do not bend them. They are not made of rubber.

- Do not slap them against stuff. That's annoying.

- Do not leave them out. Put them back before you leave. This is not your bedroom.

- (I will be checking that they have all been returned before I dismiss the class)

- To measure an angle **exactly**, use a protractor.

- **TIPS**
  - Put the cross over the vertex of the angle and line up one side of the angle with the zero
  - Extend the lines of the angle with a pencil if they don't reach to the edge of the protractor
  - Subtract the numbers that the two sides line up with. (You can use either row of numbers, but one will be WAY easier because one of the numbers will be zero)
  - *****ALWAYS CHECK TO SEE IF YOUR MEASUREMENT IS REASONABLE!!!*****

  155°   **THIS IS NOT REASONABLE!**

  73° Neither is this!!!
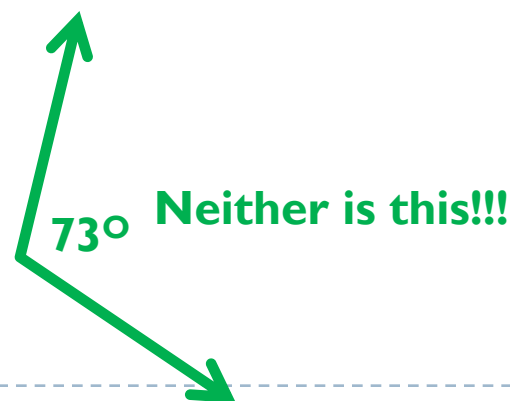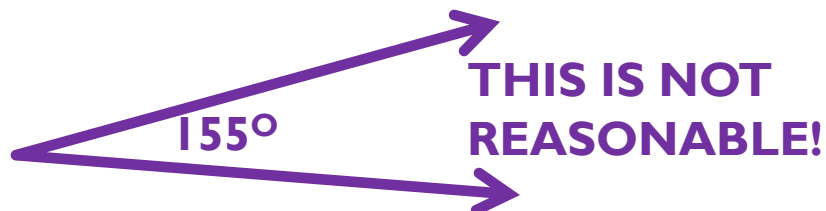
- Help each other do the "Using a Protractor" sheet

Complete HW Section 3