

Warmup 2/(The number of angles in this picture: )

DO ALL OF THESE THINGS:

- Write “Protractor CFU” on your warmup page for today.
- Write your name on your warmup page and turn it in to the tray yourself.
- Get a protractor.
- Sit back down.

If you get one wrong, you **MUST** do corrections until it is right.

If you have a bad/faded protractor, try to use it, but you can wait until a better one is available and turn in your CFU later.

QUIZ IS MONDAY!!!

- Measuring Angles with a protractor
- Complementary/Supplementary/Vertical
- Finding angle measures with parallel lines and a transversal
- Corresponding/Alternate Interior/Alternate Exterior/Same-side interior
- Angle sums of triangles (Today)

(Btw, if you want to do your ALEKS on Monday night, that will be fine this week. There will be no other homework Monday night.)

Worksheet Answers

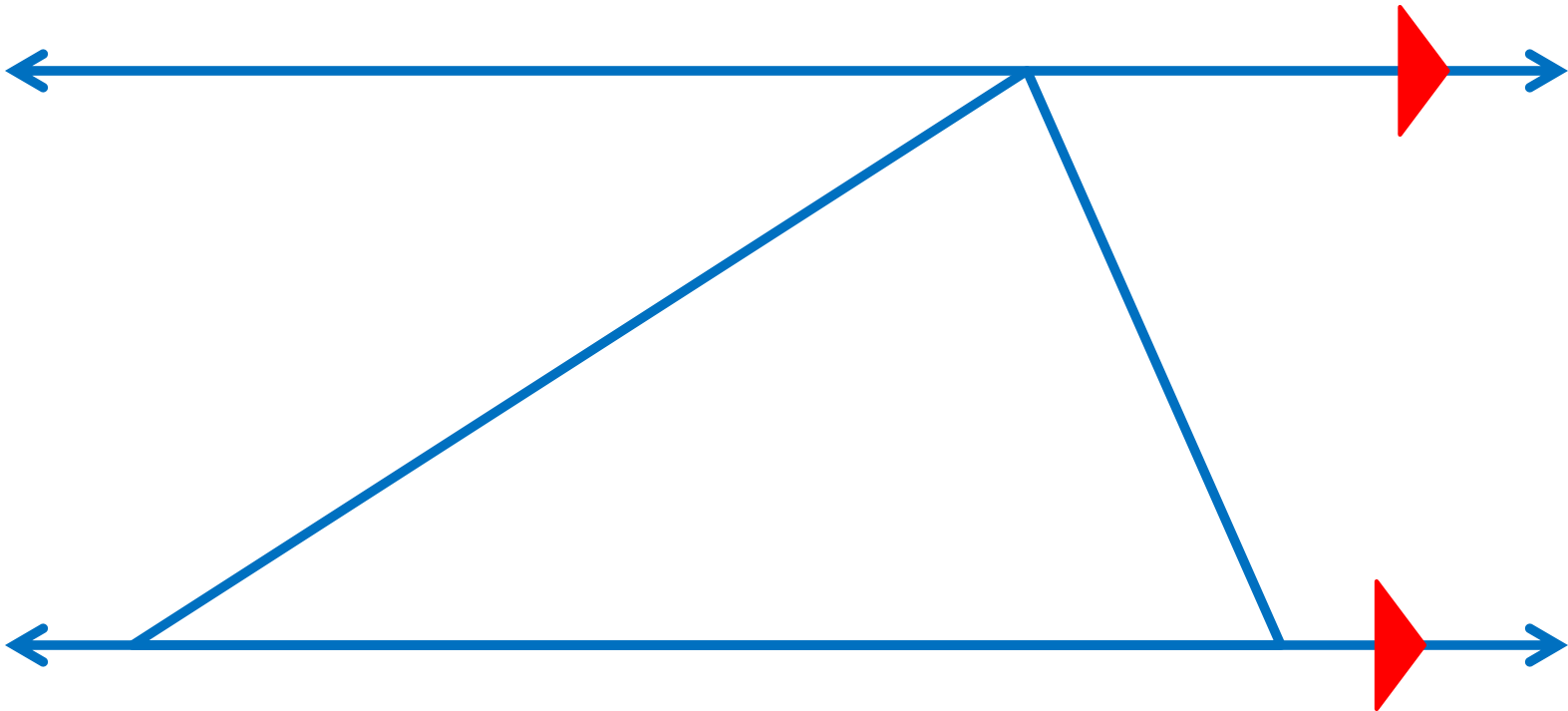


I WILL COLLECT THESE ON MONDAY!!!

NEW TOPIC: ANGLES OF TRIANGLES

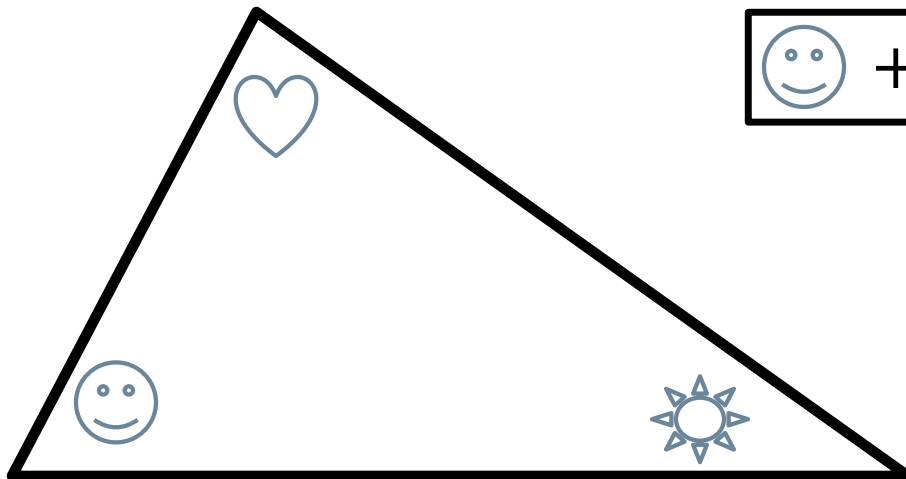
- Will be completely on whiteboards.
- There is **ONE** rule to write down – will be on the homework page.

PROVING the angle sum of a triangle...



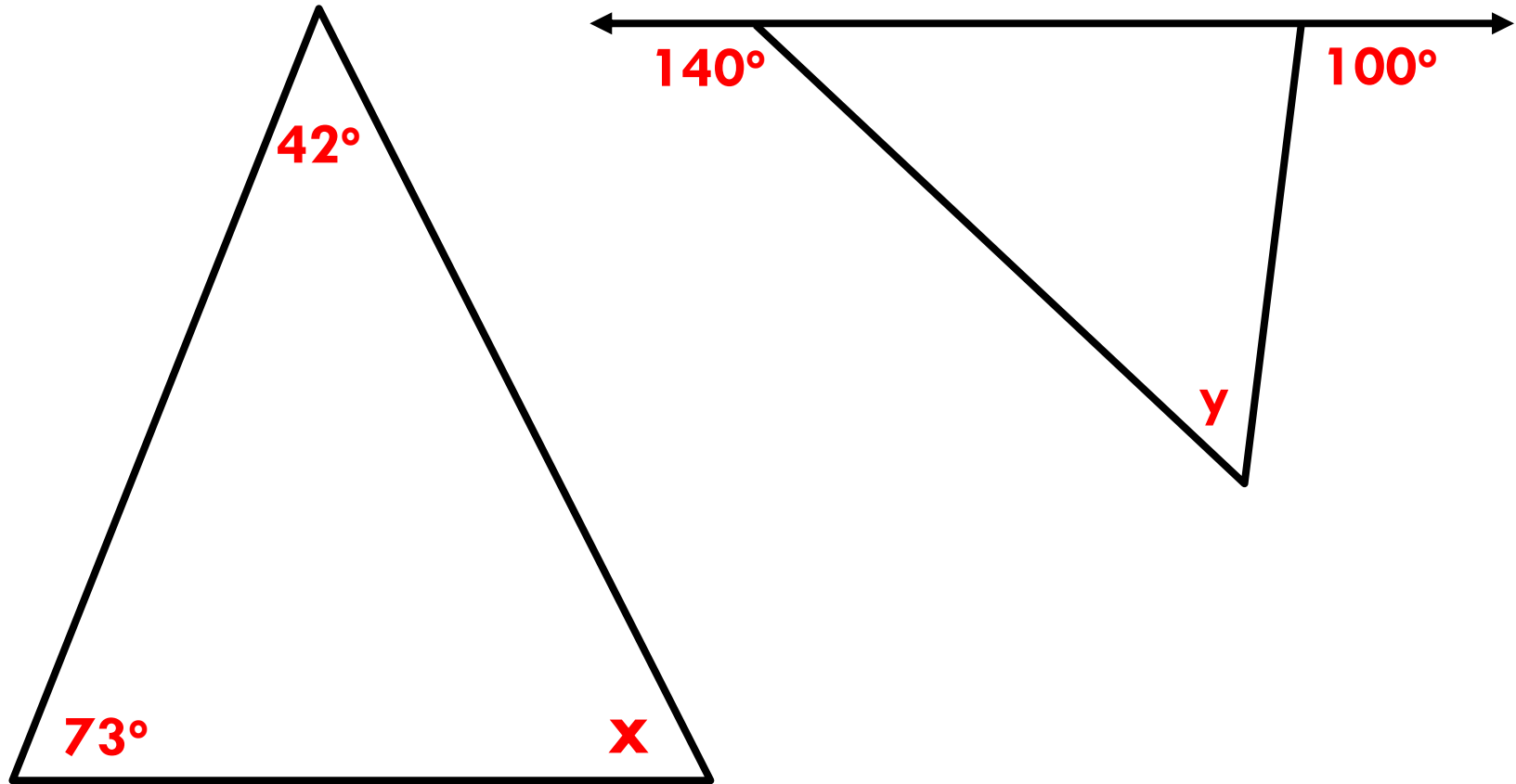
□ Interior Angles of a Triangle:

▣ Their sum is always 180° !!!!!!

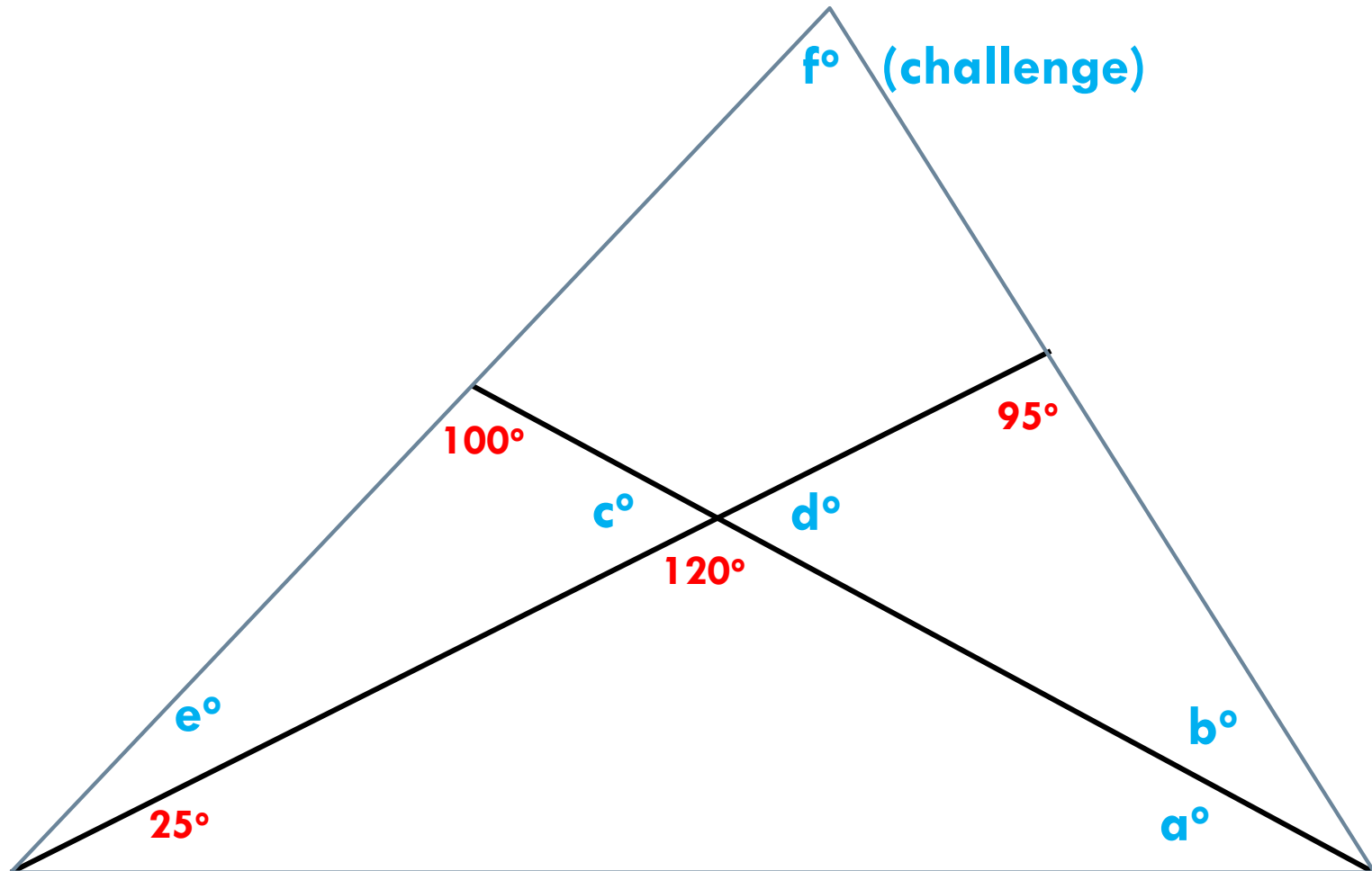


$$\text{smiley face} + \text{heart} + \text{sun} = 180^\circ$$

Find the missing angles!



Find all angle measures:



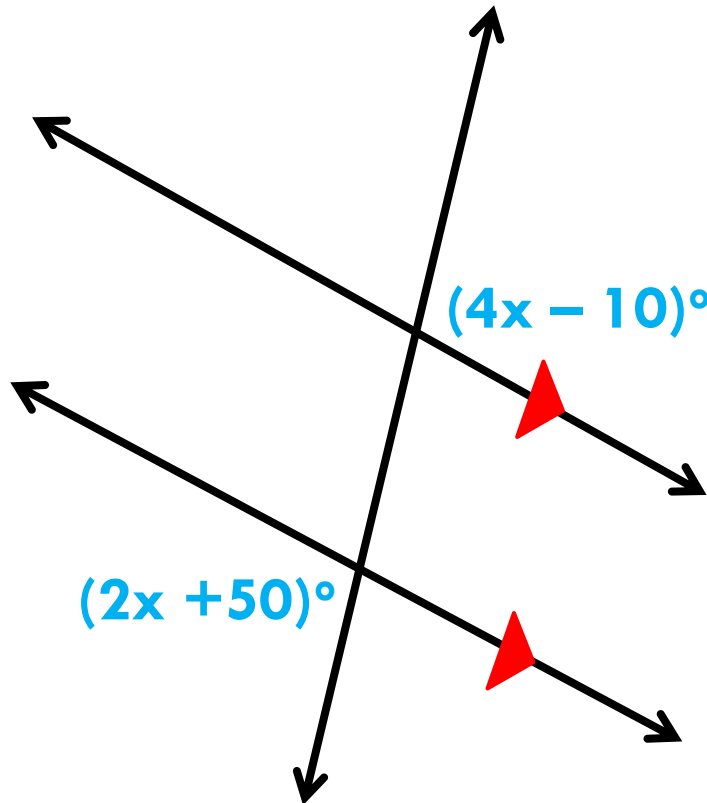
With algebra...

- Find the value of x .

Alt. Ext: congruent

$$2x + 50 = 4x - 10$$

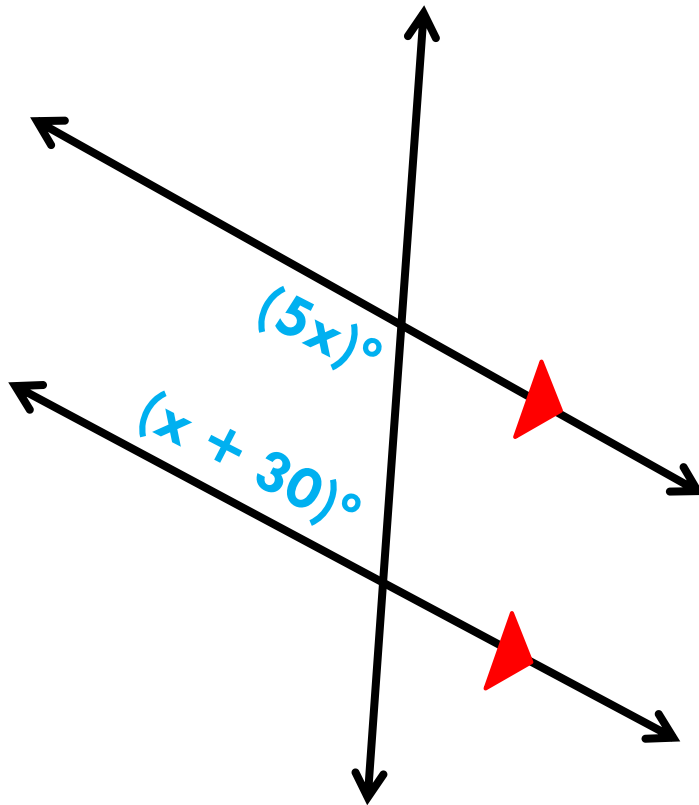
$$x = 30$$



With algebra...

- Find the measure of both angles.

Same-side interior: supplementary



$$(5x) + (x + 30) = 180$$

$$6x + 30 = 180$$

$$x = 25$$

$$\text{Top angle: } 5 \cdot 25 = 125^\circ$$

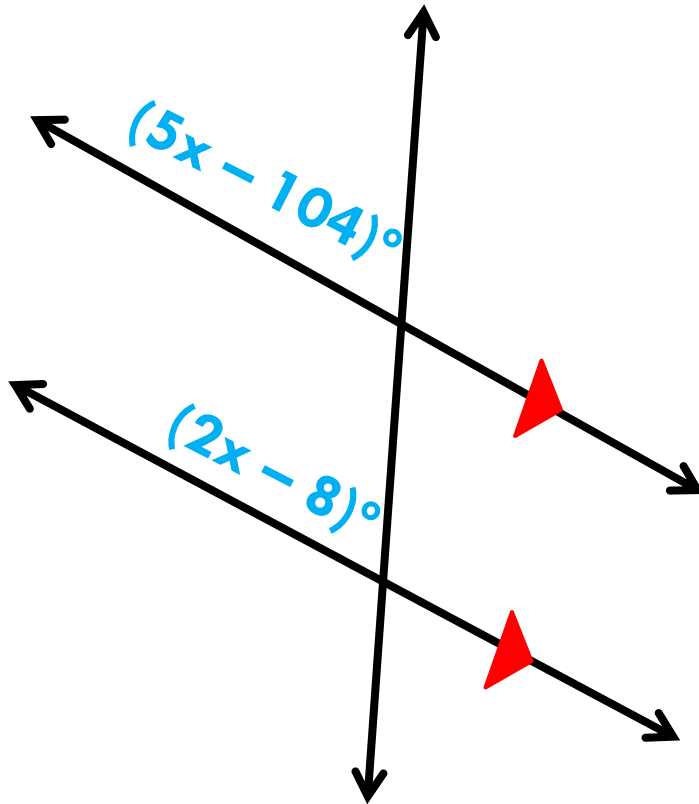
$$\text{Bottom angle: } 25 + 30 = 55^\circ$$

$$\text{Check: } 125 + 55 = 180!$$

With algebra...

- Find the measure of both angles.

Corresponding: congruent



$$5x - 104 = 2x - 8$$

$$3x - 104 = -8$$

$$3x = 96$$

$$x = 32$$

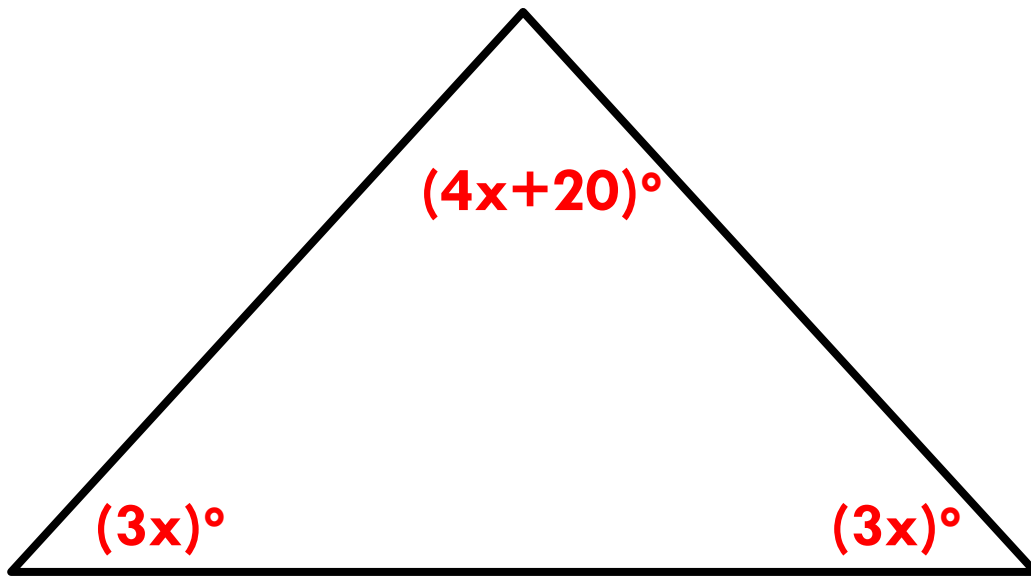
$$\text{Top angle: } 5 \cdot 32 - 104 = 56^\circ$$

$$\text{Bottom angle: } 2 \cdot 32 - 8 = 56^\circ$$

Check: They're the same!

Algebra Connection...

□ Find the measure of each angle:



$$(3x) + (3x) + (4x + 20) = 180$$

$$10x + 20 = 180$$

$$10x = 160$$

$$x = 16$$

$$(3x) = 3 \cdot 16 = 48^\circ$$

$$(4x + 20) = 4 \cdot 16 + 20 = 84$$

$$48^\circ, 48^\circ, 84^\circ$$

$$\text{Check: } 48 + 48 + 84 = 180!$$

HOMEWORK

- Finish the worksheet
- THE ANSWER KEY WILL BE ONLINE – STUDY THIS AFTER YOU FINISH!!!