Warmup $2/$(**Exponent of** $x^2 \cdot x \cdot x^7$)

Simplify each as much as possible.

1) $4a^2 \cdot 2b^3 \cdot 5a^4 b$

2) $\dfrac{5c^2 d^8}{15c^4 d^3}$

3) $\left(4f^2 g^3\right)^4$

UPDATE

- Angles Quiz is now WEDNESDAY

- Today – Angles of Triangles
- Tomorrow – Review

- **BY THE WAY – 3rd and 4th period switch starts Wednesday**

QUIZ Topics

- Naming angles correctly using 3 letters

- 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)

Worksheet Answers

Table of Contents (2nd Semester)

Angle Sum of a Triangle + Review
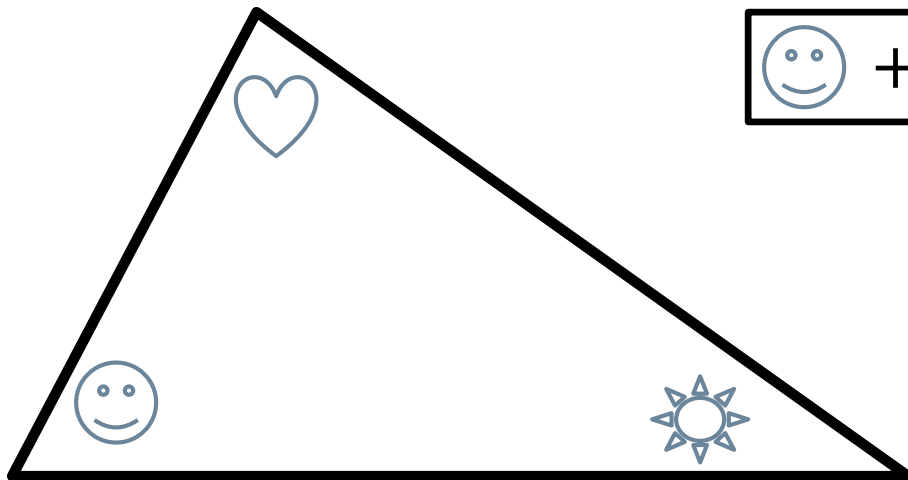
<u>Objectives:</u>

- ☐ Given two angles in a triangle, find the measure of the third

- ☐ Use <u>all</u> the angle rules we have learned

- ☐ Set up the correct equation based on how the diagram looks
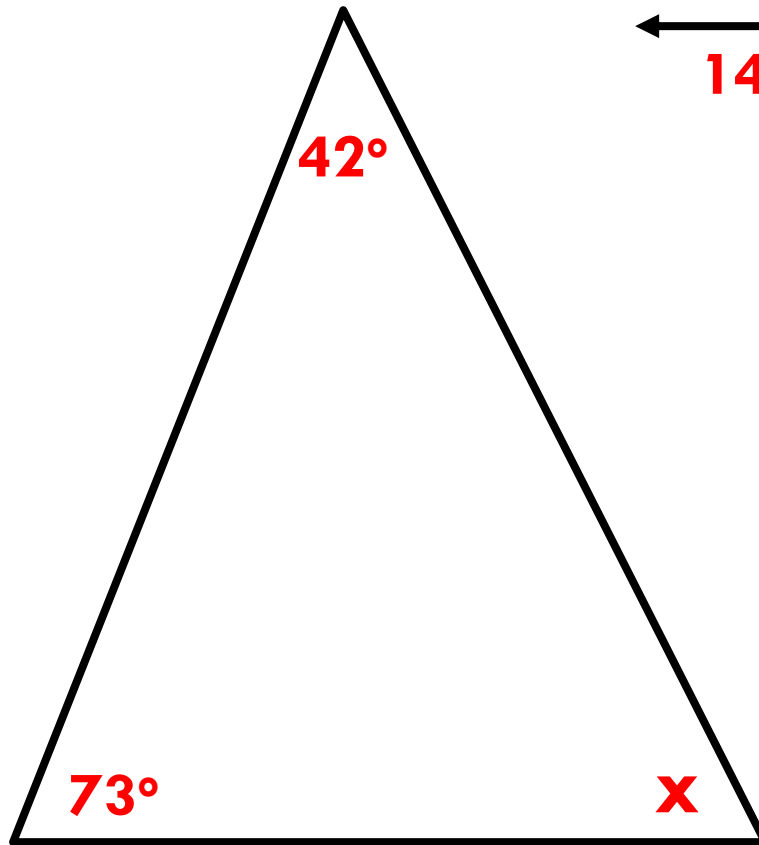
Investigating the Angles of a Triangle…

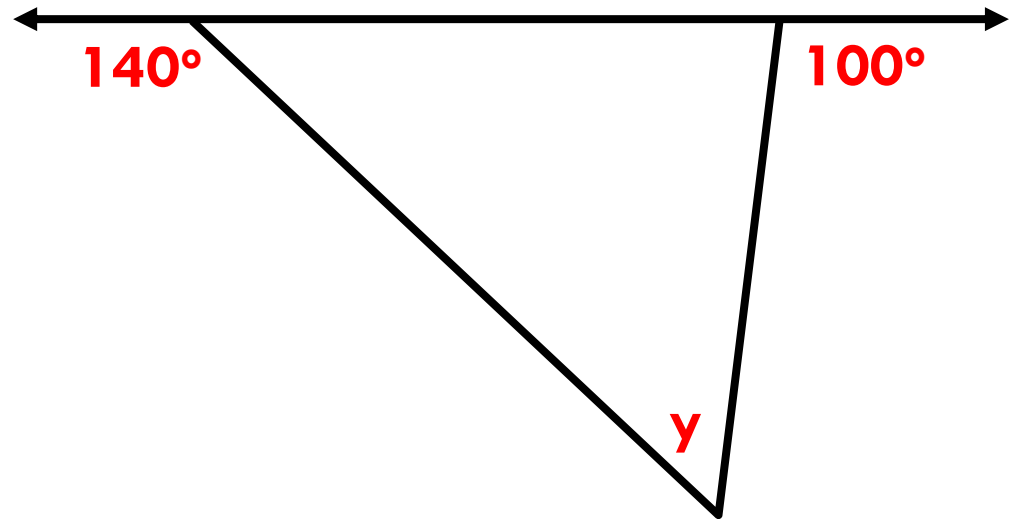# □Interior Angles of a Triangle:

□Their sum is always 180°!!!!!!

$$\text{☺} + \heartsuit + \text{☀} = 180°$$

Find the missing angles!

42°

140°   100°

y

73°   X

x = 65

Find other 2 interior angles first
y = 60

Find all angle measures:

f° (challenge)

a = 35
b = 25
c = 60
d = 60
e = 20
f = 75

100°

95°

c°   d°

120°

e°

b°

25°

a°
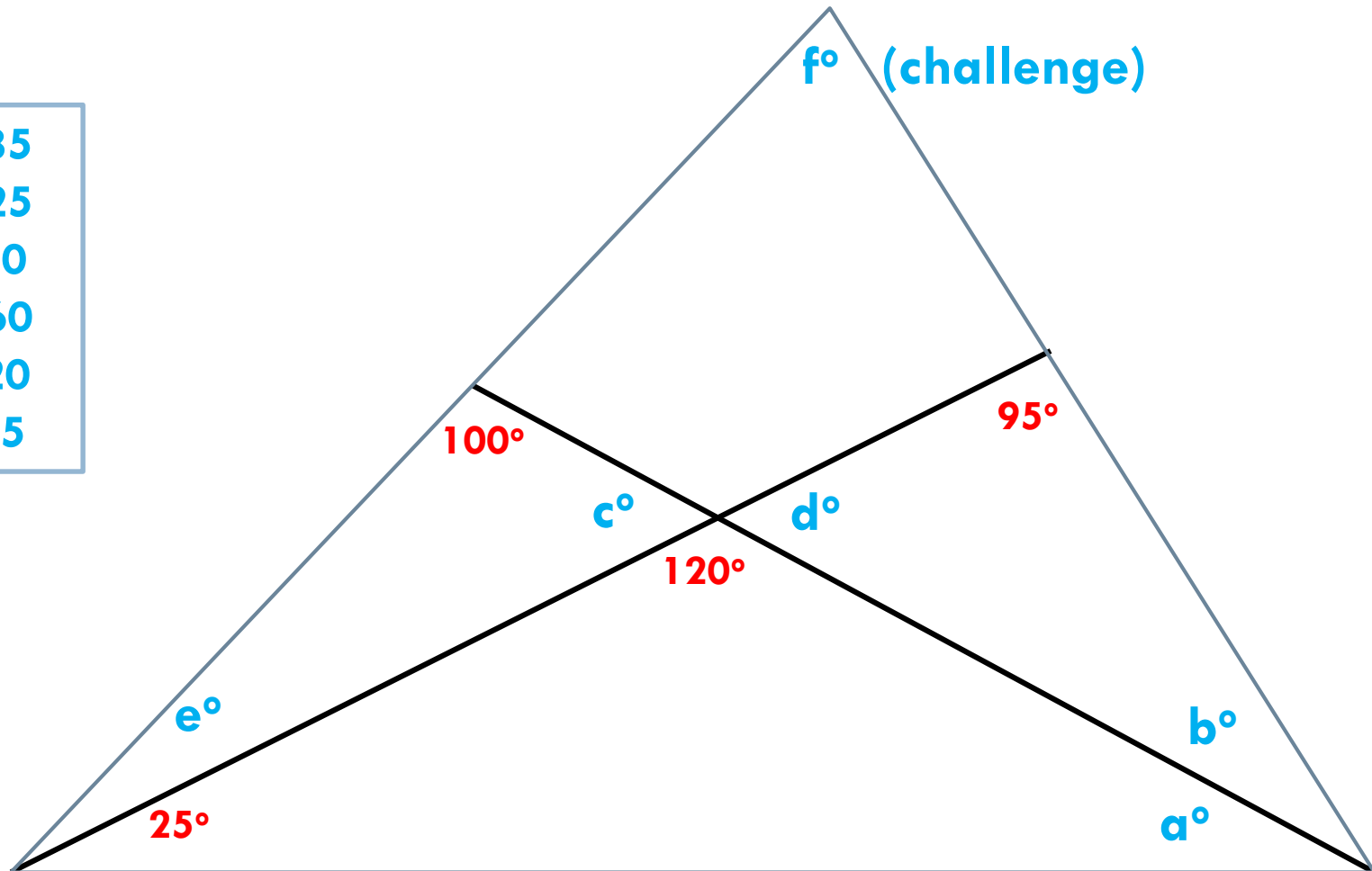
Algebra Connection…

☐ **Find the measure of each angle:**
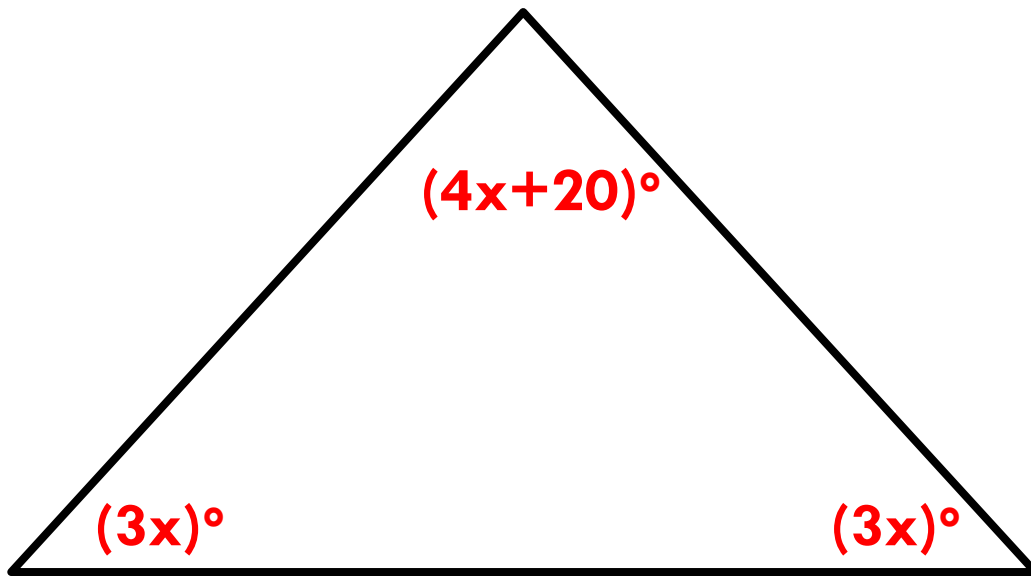
(3x) + (3x) + (4x + 20) = 180

10x + 20 = 180

10x = 160

x = 16

(3x) = 3•16 = 48°

(4x + 20) = 4•16 + 20 = 84

48°, 48°, 84°

Check: 48 + 48 + 84 = 180!

Homework

- p. 393 (1, 2, 6, 8, 12, 14)