

WARMUP

Which info are you given in each picture?

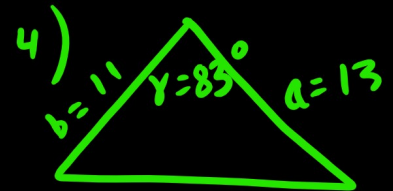
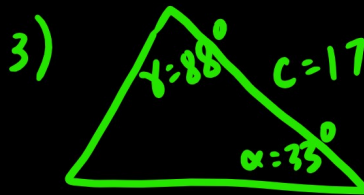
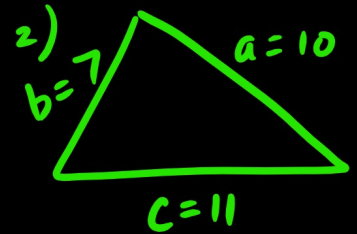
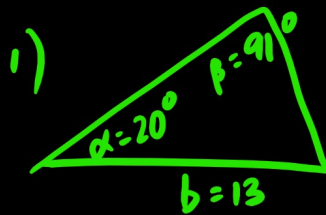
A) ASA

B) SAS

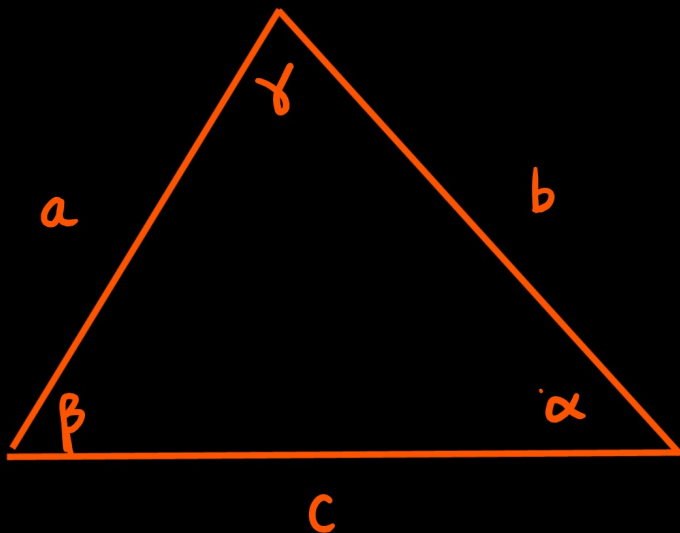
C) SSS

D) AAS

E) SSA



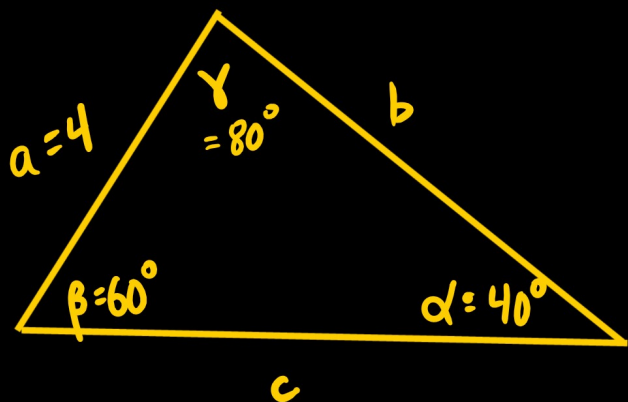
Section 7.2 The Law of Sines



$$\frac{\sin \alpha}{a} = \frac{\sin \beta}{b} = \frac{\sin \gamma}{c}$$

Use Law of Sines
for AAS, ASA,
and SSA

ex: Solve the triangle: $\alpha = 40^\circ$, $\beta = 60^\circ$, $a = 4$



$$\gamma = \underline{80^\circ}$$

$$c = \underline{6.1}$$

$$b = \underline{5.4}$$

$$\gamma = 180^\circ - 60^\circ - 40^\circ = 80^\circ$$

$$\frac{\sin 40^\circ}{4} = \frac{\sin 80^\circ}{c}$$

$$\frac{c \cancel{\sin 40^\circ}}{\cancel{\sin 40^\circ}} = \frac{4 \sin 80^\circ}{\sin 40^\circ}$$

$$c = 6.1$$

$$\frac{\sin 40^\circ}{4} = \frac{\sin 60^\circ}{b}$$

$$\frac{b \cancel{\sin 40^\circ}}{\cancel{\sin 40^\circ}} = \frac{4 \sin 60^\circ}{\sin 40^\circ}$$

$$4 * \sin(60) / \sin(40)$$

$$b = 5.4$$

p547 1-13 odd

$$\frac{5}{11} = \frac{17}{x}$$

$$\frac{11 \cdot 17}{5} = x$$

S 80° E

