

Triangle Congruency Constructions

- Use a compass, protractor and ruler for all constructions
- On the triangle label the following
 - Each vertex
 - Each dimension you used to measure it
 - The Congruence shortcut of the dimensions used
- Which shortcuts don't work?? (they don't prove congruence)
 - Create more than one of the triangle when it will create 2 non-congruent triangles (which triangles will these be?).
- All triangle constructions should fit on the front and back of one piece of paper
- You will be graded on
 - Accuracy of constructions
 - Correctly identifying the congruence shortcut
 - Correctly labeling your triangles

ΔFLY

$$\angle F = 38^\circ$$

$$FL = 9 \text{ cm}$$

$$FY = 11.5 \text{ cm}$$

ΔYAK

$$\angle Y = 70^\circ$$

$$\angle A = 30^\circ$$

$$\angle K = 80^\circ$$

ΔAPE

$$\angle A = 70^\circ$$

$$\angle E = 25^\circ$$

$$AP = 7 \text{ cm}$$

ΔHOG

$$\angle O = 30^\circ$$

$$OG = 7 \text{ cm}$$

$$GH = 4.6 \text{ cm}$$

ΔFOX

$$\angle O = 90^\circ$$

$$OX = 4.3 \text{ cm}$$

$$FX = 10 \text{ cm}$$

ΔPIG

$$PI = 8 \text{ cm}$$

$$IG = 7.2 \text{ cm}$$

$$GP = 6.5 \text{ cm}$$

ΔRAM

$$\angle R = 15^\circ$$

$$\angle A = 140^\circ$$

$$RA = 7.3 \text{ cm}$$