Triangle Congruence Constructions

Please make a pre-sketch – a triangle with the dimensions marked so you can see where you will actually measure each angle or length and so you can determine the shortcut you are using BEFORE you start actually constructing the triangle.

On your constructed triangle please do the following:

1. Label each vertex
2. Label each dimension used (there should be 3)
3. Write the congruence shortcut in the middle of the triangle.

1. ΔFLY ∠F = 38° FL = 9 cm FY = 11.5 cm	2. ΔYAK ∠Y = 70° ∠A = 30° ∠K = 80°	3. ΔAPE ∠A = 70° ∠E = 25° AP = 7 cm
4. ΔHOG ∠O = 30° OG = 7 cm GH = 4.6 cm	5. ΔFOX ∠O = 90° OX = 4.3 cm FX = 10 cm	6. ΔPIG PI = 8 cm IG = 7.2 cm GP = 6.5 cm
7. ΔRAM ∠R = 15° ∠A = 140° RA = 7.3 cm	8. Two of the triangles constructed above use false shortcuts. What two triangles are they and what are their false shortcuts? Make a second triangle that is not congruent to the first triangle for each of the two triangles that use false shortcuts. These should clearly prove that you can use the same given information to create two non-congruent triangles.	