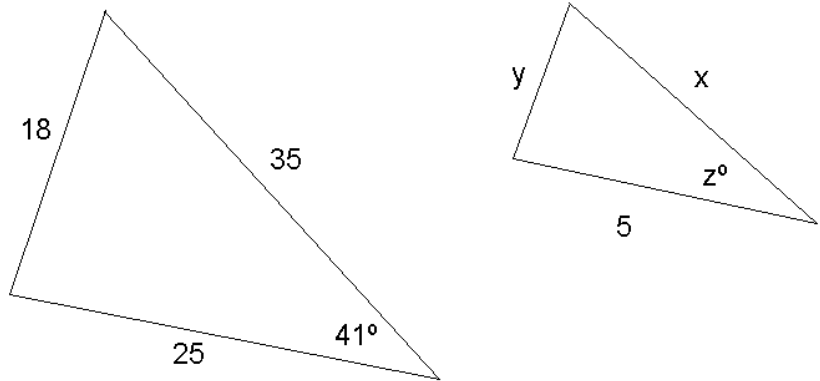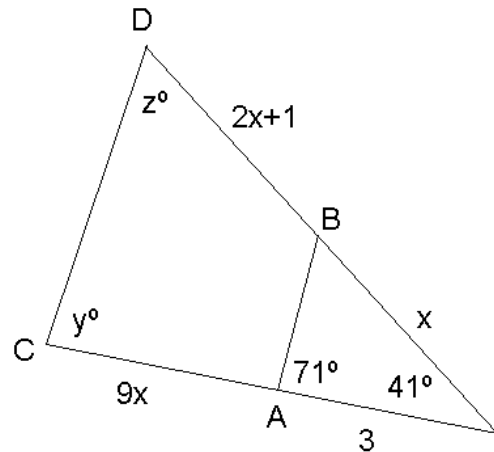# QUIZ 18 – MATH GRADE 9
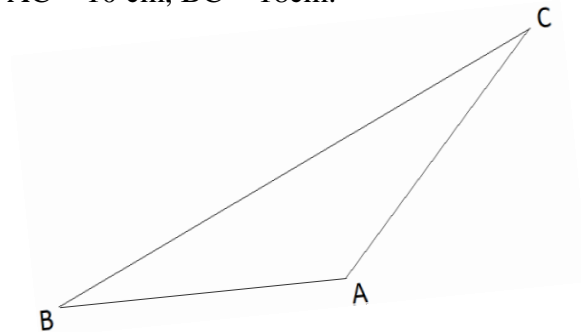
1. (15%) Given that the triangles are similar, find x, y, z:
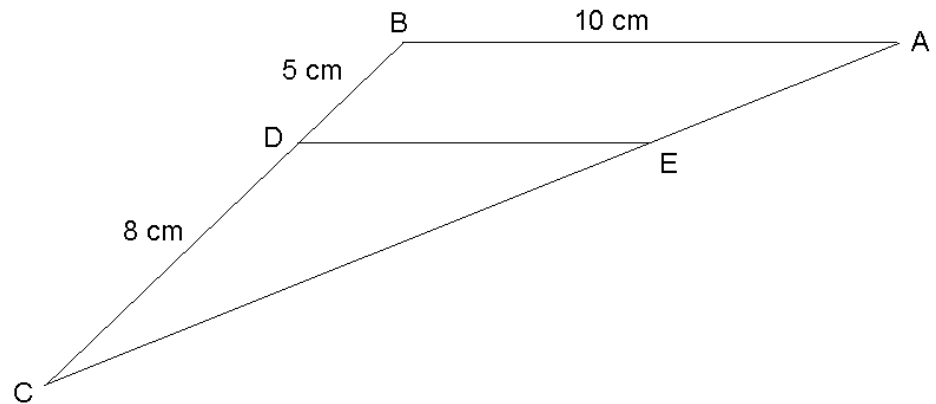

2. (20%) Given that AB || CD, find x, y and z.

3. (10%) Given the triangle ABC. AB = AC = 10 cm, BC = 18cm.

Sketch a similar triangle with perimeter half as big and find the length of all its sides.

4. (10%) Sketch 2 similar triangles who can be proved similar by SAS. Explain why are they similar. Include all the relevant lengths and/or angles.

5. (20%) Given the following diagram in which DC is <u>parallel</u> to AB. Find the length DE. If using similar triangles explain why they are similar.

6. (5%) All isosceles right triangles are similar: True /False, explain:

7. (5%) All right angled triangles are similar: True /False, explain:

8. (15%) Explain all the ways in which triangles can be proved similar, <u>give an example in each case.</u>