

Geometry

Similar and congruent shapes

1. Name five congruent shapes which you can find in your kitchen at home (e.g. two dinner plates).

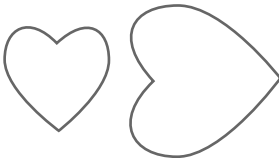


Reminder

Congruent polygons are equal in all respects.

2. Circle the figures that are congruent.

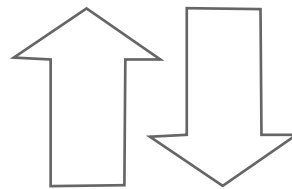
a)



b)



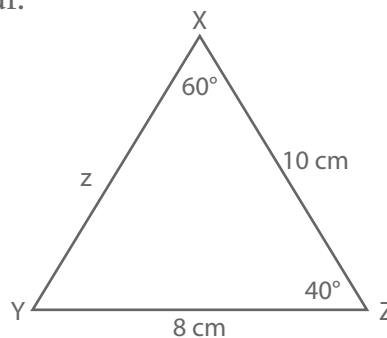
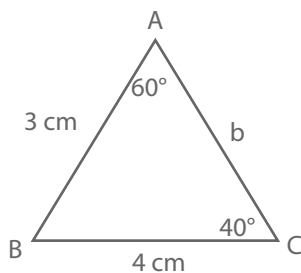
c)



d)



3. The two polygons below are similar.



Reminder

Similar polygons have the same shape but not the same size.

Find the sizes of the following.

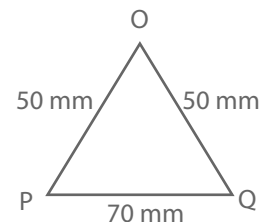
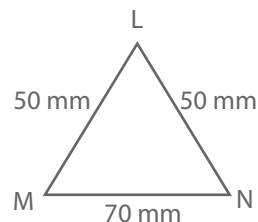
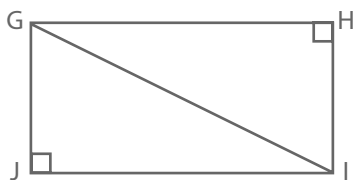
a) $\angle B$

b) $\angle Y$

c) b

d) z

4. Are the figures below congruent? Give reasons for your answer.



a) $\triangle GIJ$ and $\triangle HIG$

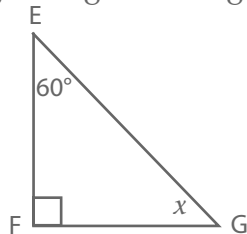
b) $\triangle LMN$ and $\triangle OPQ$

Geometry

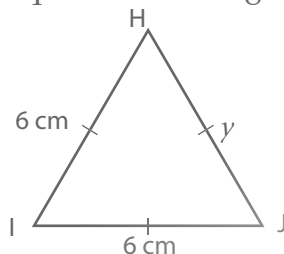
Problem solving

1. Find the values for x , y and z .

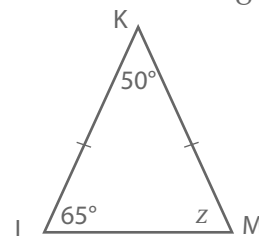
a) Right-angled triangle



b) Equilateral triangle



c) Isosceles triangle



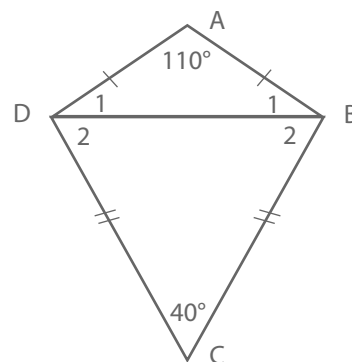
2. Find the unknown angles in the adjacent figure.

a) $\angle D_1$

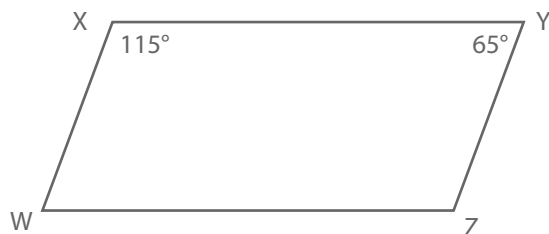
b) $\angle B_1$

c) $\angle D_2$

d) $\angle B_2$



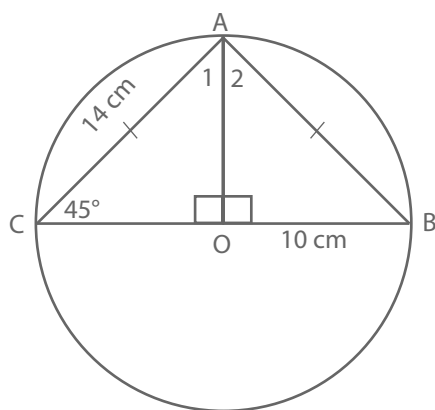
3. Determine the missing angles in the parallelogram below.



a) $\angle XWZ$

b) $\angle WZY$

4. Determine the missing angles and sides in the figure below.



a) $\angle ABC$

b) $\angle A_1$

c) $\angle A_2$

d) AB

e) CO