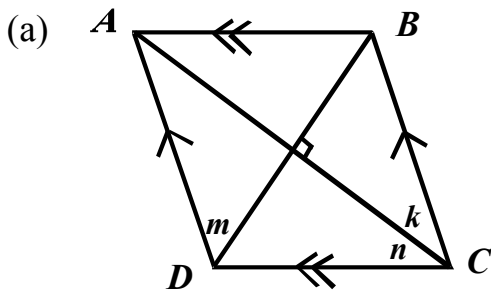


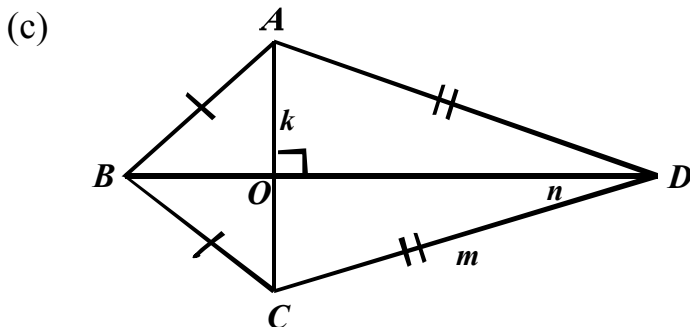
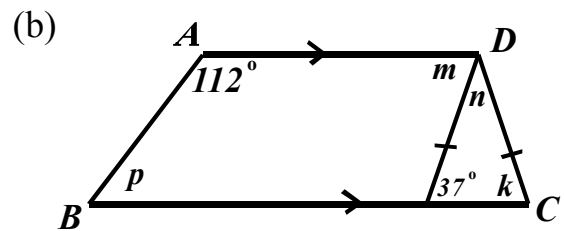
Exercise 2015-8EO-00002(1)

(1) Make use of a table to indicate the similarities and differences between a parallelogram and a rectangle.

(2) Which type of quadrilateral will ABCD present? Use the properties of such a quadrilateral and calculate the values of m , n , k and/or p . Show all calculations and give reasons. If necessary, round off to 1 decimal.

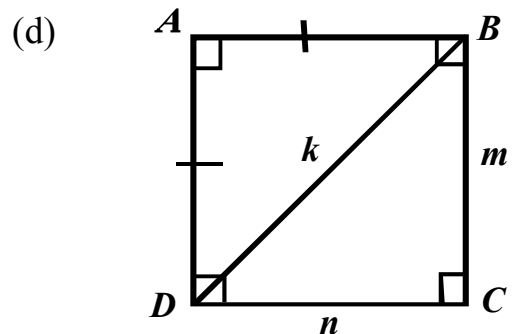


$$\angle ADB = 74^\circ \text{ and } AB = BC$$



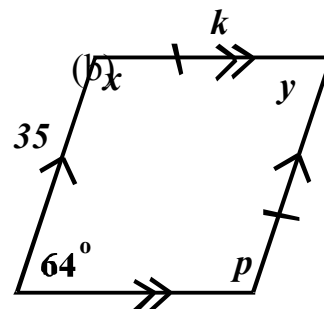
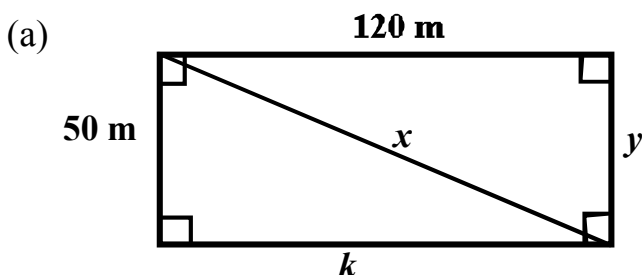
$$AC = 10 \text{ cm and } OD = 12 \text{ cm}$$

$$\angle AOD = 52^\circ$$



$$AB = DB = 6 \text{ cm}$$

(3) Determine the value(s) of m , p , n and/or k in each of the following sketches. Also give complete reasons. If possible, calculate the perimeter and area of the given quadrilateral.



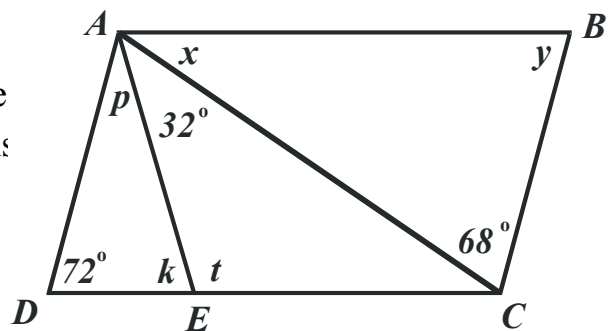
(4) Complete the following:

- (a) A rhombus is a parallelogram for which.....
- (b) A rectangle is a parallelogram for which.....
- (c) A parallelogram is a quadrilateral for which

(5) Construct a kite with sides 30 mm and 45 mm. The angles where the equal sides meet one another is equal to 60° and 40° respectively. Clearly show how all measurements were calculated. Give complete reasons for all your statements.

(6) In the sketch ABCD is a parallelogram.

Prove that $\triangle ADE$ is an isosceles triangle
Show all steps and give complete reasons



(7) Explain the difference between a polygon and a regular polygon. Give two typical properties of a regular polygon to indicate the difference.