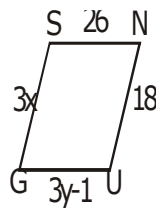


UNDERSTANDING QUADRILATERALS

KINDS OF QUADRILATERALS

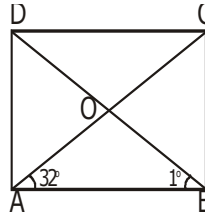
EXERCISE

- Q.1** PQRS is a parallelogram. What special name will you give it if the following additional facts are known ?
(i) $PQ = PS$ (ii) $\angle SPQ = 90^\circ$ (iii) $PQ = PS$ and $\angle SPQ = 90^\circ$
- Q.2** PQRS is a trapezium in which $PQ \parallel RS$. If $\angle P = \angle Q = 50^\circ$, what are the measures of the other two angles ?
- Q.3** ABCD is a trapezium in which $AB \parallel CD$. If $\angle A = \angle B = 40^\circ$, what are the measure of the other two angles ?
- Q.4** The angles A, B, C and D of a quadrilateral ABCD are in the ratio 1 : 3 : 7 : 9
(i) Find the measure of each angle.
(ii) Is ABCD a trapezium ? Why ?
(iii) Is ABCD a parallelogram ? Why ?
- Q.5** Two adjacent angles of parallelogram are in the ratio of 1:5. Find all the angles of the parallelogram.
- Q.6** One angle of a parallelogram is of measure 70° . Find the measures of the remaining angles of the parallelogram.
- Q.7** One angle of a parallelogram is of measure 80° . Find the measures of the remaining angles of the parallelogram.
- Q.8** The adjoining figure GUNS is a parallelogram. Find x and y.

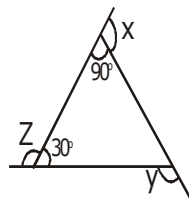


Q.9 Two adjacent angles of a parallelogram are in the ratio 2:3. Find all the angles of the parallelogram.

Q.10 ABCD is a rectangle with $\angle BAC = 32^\circ$. Determine $\angle DBC$.



Q.11 Find $x + y + z$.



ANSWER KEY

1. (i) Rhombus (ii) Rectangle (iii) Square
2. $130^\circ, 130^\circ$
3. Each 140°
4. (i) $18^\circ, 54^\circ, 126^\circ, 162^\circ$ (ii) Yes (iii) No
5. $30^\circ, 150^\circ, 30^\circ, 150^\circ$
6. $110^\circ, 70^\circ, 110^\circ$
7. $100^\circ, 80^\circ, 100^\circ$
8. $x = 6, y = 9$
9. $72^\circ, 108^\circ, 72^\circ, 108^\circ$
10. 58°
11. 360°