

SUBJECT-MATHEMATICS
CHAPTER-6 (LINES AND ANGLES)
WORKSHEET (BASIC)

TIME- 45 Min

MAX. MARKS: 20

Choose the correct option: ($2 \times 1 = 2$)

- If one angle of a triangle is equal to the sum of the other two angles, then the triangle is
(a) an isosceles triangle (b) an obtuse triangle
(c) an equilateral triangle (c) a right triangle
- An exterior angle is 105° and its two interior opposite angles are equal. Each of these equal angles is
(a) $37\frac{1}{2}^\circ$ (b) $52\frac{1}{2}^\circ$ (c) $72\frac{1}{2}^\circ$ (b) 75°

Fill in the blanks: ($2 \times 1 = 2$)

- An angle is equal to two third of its complement then the angle is equal to _____
- If length of each side of an equilateral triangle is doubled then degree measure of vertical angle will be _____

Answer the following: ($2 \times 1 = 2$)

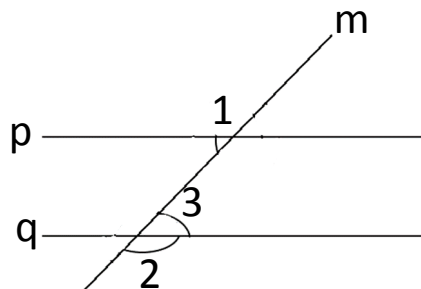
- The angles of a triangle are arranged in ascending order of magnitude. If the difference between two consecutive angles is 10° , find all the three angles.
- Angles of a triangle are in the ratio 2:4:3. Find the smallest angle of the triangle.

SHORT ANSWER TYPE-I ($2 \times 2 = 4$)

- If two times the measure of one angle is three times the measure of other which is its complement, find the angles.
- ABC is a right angled triangle in which $\angle A = 90^\circ$ and $AB = AC$, find the value of $\angle B$ and $\angle C$.

SHORT ANSWER TYPE-II ($2 \times 3 = 6$)

- In the given figure, $\angle 1 = 61^\circ$ and $\angle 2 = 118^\circ$. Is $p \parallel q$? Give reasons.



2. In $\triangle ABC$, $\angle A - \angle B = 15^\circ$, $\angle B - \angle C = 30^\circ$, find $\angle A$, $\angle B$ & $\angle C$.

LONG ANSWER TYPE: (1 \times 4 = 4)

1. Two lines AB and CD intersect at O. If $\angle AOC + \angle COB + \angle BOD = 270^\circ$, find the measures of $\angle AOC$, $\angle COB$, $\angle BOD$ & $\angle DOA$