



INDIAN SCHOOL AL WADI AL KABIR

Class: XI	Department: SCIENCE	Date: 22/05/2025
MARKS: 30	UNIT TEST 1 <u>ENGINEERING GRAPHICS (046)</u> <u>MARKING SCHEME</u>	DURATION :1 HOUR

General Instructions:

- (i) Attempt all the questions.
- (ii) Use both sides of the drawing sheet, if necessary.
- (iii) All dimensions are in millimeters.
- (iv) Missing and mismatching dimensions, if any, may be suitably assumed.
- (v) Follow the SP: 46 – 2003 revised codes. (with first angle method of projection)

10 × 1 = 10

SECTION – A

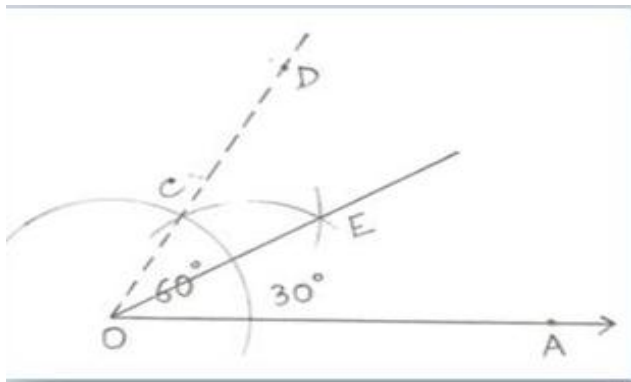
Q.NO	ANSWERS
1	(b) meters
2	(a) Circular
3	(c) Continuous thick line
4	(c) Hatching line
5	(b) Aligned system
6	(a) Hexagon

7	a) 1-iii, 2-iv, 3-i, 4-ii
8	(a) Circumference = $\pi \times \text{Diameter}$
9	(c) 62.83 cm
10	(b) Concentric circles

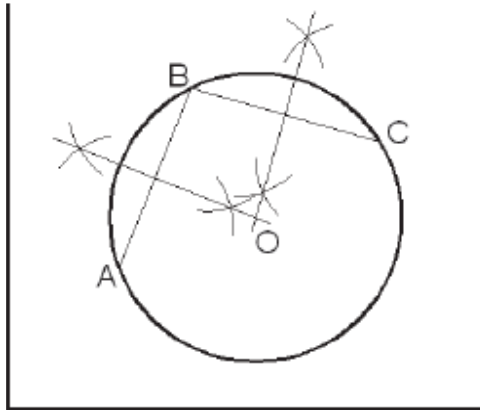
SECTION B

$$2 \times 2 = 4$$

11. Construct a 30-degree angle using compasses.

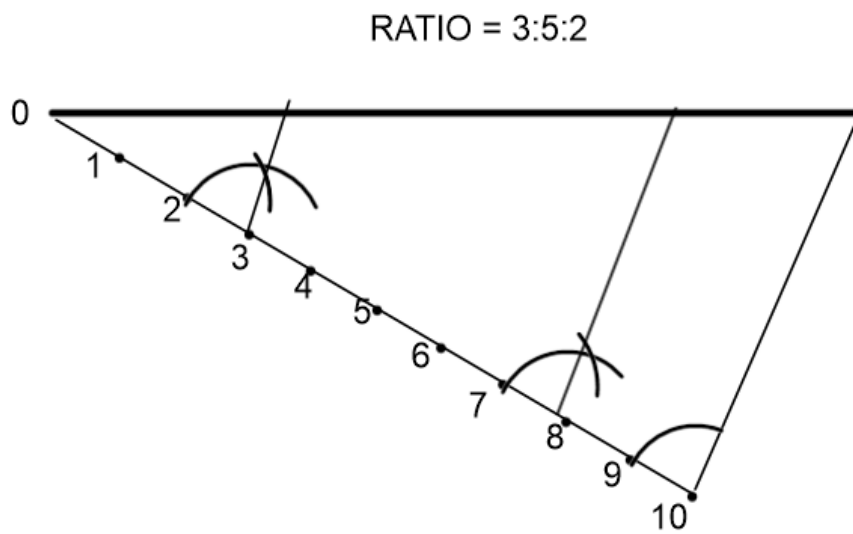


12. To draw a circle passing through three non-collinear points A, B and C.

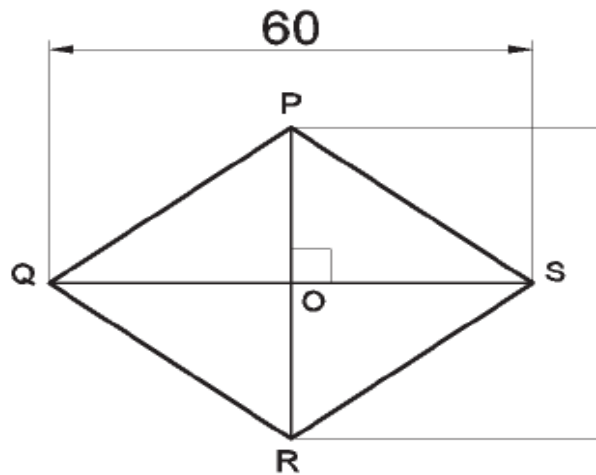


$$2 \times 3 = 6$$

13. Divide a straight-line AB in the ratio 3:5:2.

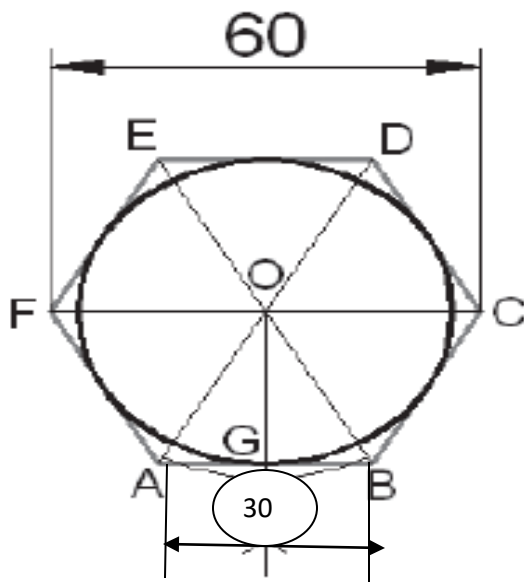


14. Construct a rhombus PQRS with diagonals 46 mm and QS = 60 mm.



$$2 \times 5 = 10$$

15. Construct a regular hexagon with base AB = 30 mm using protractor, now inscribe a circle in it.



16. Construct a regular pentagon of 40 mm using compasses.

