INDIAN SCHOOL AL WADI AL KABIR

Class: XI	Department: SCIENCE – 2023-2024	Date of Completion: 31.01.24
	SUBJECT: **ENGINEERING GRAPHICS**	
Worksheet No:6 With Answers	Topic: **ISOMETRIC PROJECTION**	Note: A4 FILE FORMAT
NAME OF THE STUDENT:	CLASS: XI SECTION:C/E	ROLL NO:

Questions

1. Draw the isometric projection of square of 60 mm in HP.

2. Draw the isometric projection of an equilateral triangle of 35 mm in VP.

3. Draw the isometric projection of pentagon of 30 mm in HP.

4. Draw the isometric projection of hexagon of 50 mm in VP

5. Draw the isometric projection of a rectangle ABCD having AB = 40 mm and AD = 60 mm, standing on the horizontal plane on one of its sides AB.

6. Draw the isometric projection of circle of 50 mm diameter having its surface parallel to HP.

MULTIPLE CHOICE QUESTIONS

1. The isometric projection of a circle is --------------

   a) Ellipse

   b) Circle

   c) Sphere

   d) None of the above

2. In isometric projection all the three principal axes are inclined at an angle of -------

a) 30 degree

b) 45 degree

c) 120 degree

d) 90 degree

3.The angle difference between true scale and isometric scale is -------

a)30 degree

b) 15 degree

c)45 degree

d) None of the above

4. The isometric length is measured in isometric scale at an angle of -----------

a) 90 degree

b)45 degree

c) 30 degree

d) 20 degree

5. The true length is measured in isometric scale at an angle of -----------

a) 15 degree

b) 90 degree

c) 45 degree

d) 30 degree

6.Isometric projection is smaller than actual drawings up to the value --------

a) 82 %

b)90 %

c)75%

d)None of the above

7. The word isometric means----------

a) unequal

b) equal measure

c) parallel

d) perpendicular

8.The lines which are parallel to the isometric axes are called----------

   a) Parallel lines
   b) Perpendicular lines
   c) Non-isometric lines
   d) Isometric lines

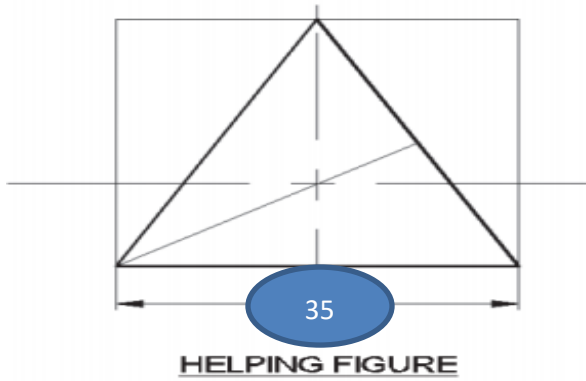# MULTIPLE CHOICE QUESTIONS

ANSWERS

S.NO	ANSWERS
1.	a) Ellipse
2.	c) 120 degree
3.	b) 15 degree
4.	c) 30 degree
5.	c) 45 degree
6.	a) 82%
7.	b) equal measure
8.	d) isometric lines

SOLUTIONS FOR DRAWINGS

1.

ISOMETRIC PROJECTION

2.

35

35

HELPING FIGURE

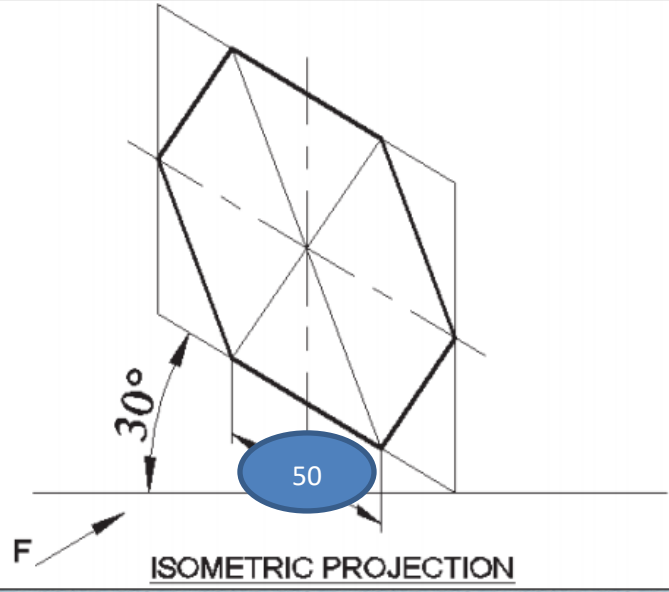**35**

30°

F

ISOMETRIC PROJECTION

3.

30°

30

30°

30

F
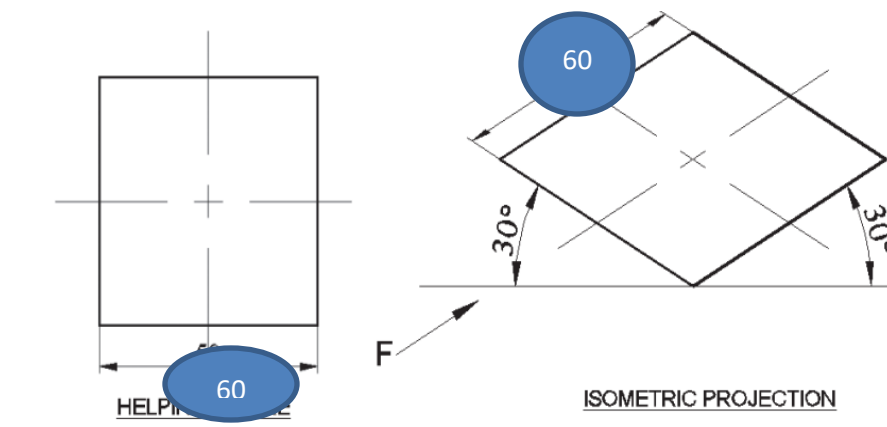
HELPING FIGURE

ISOMETRIC PROJECTION

4.

50

5

30

HELPING FIGURE

30°

50
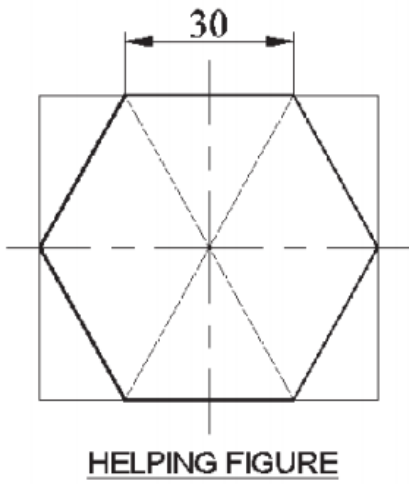
F
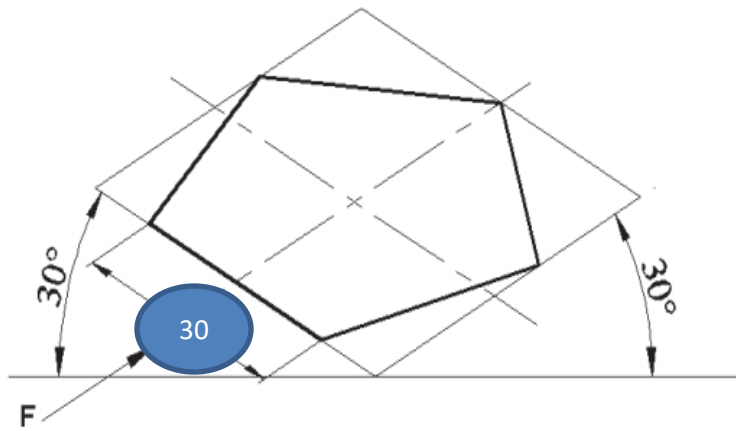
ISOMETRIC PROJECTION

Isometric projection of rectangle

d
c

60

a
40
b

Helping figure

c

d

60

30 degree
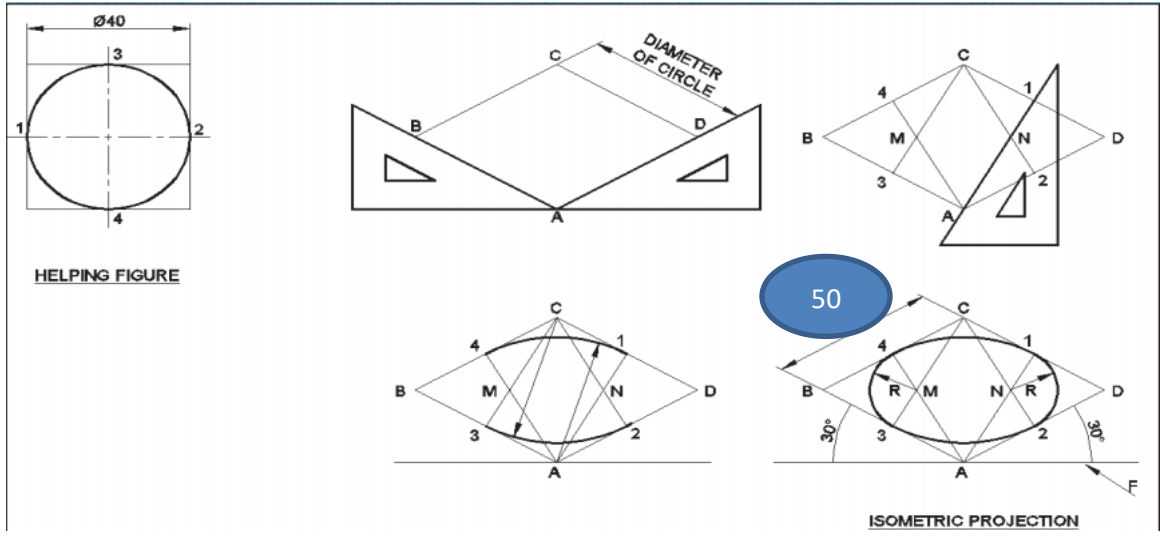40
b
30 degree

a

F

5.

6.

50

Ø40

3

1   2

4

HELPING FIGURE

C

DIAMETER
OF CIRCLE

B   D

A

C

4   1

B   M   N   D

3   2

A

50

C

4   1

B   M   N   D

3   2

A

C

4   1

B   R M   N R   D

30°   3   2   30°

A   F

ISOMETRIC PROJECTION
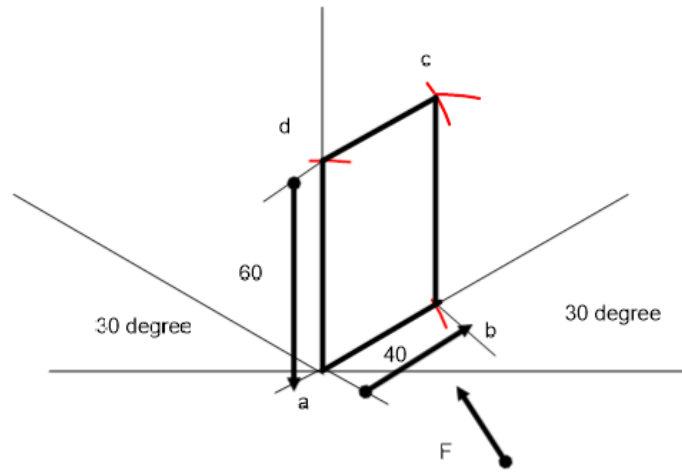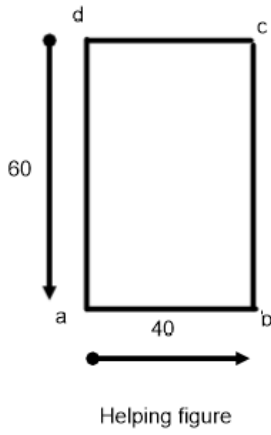
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