
	<b>INDIAN SCHOOL AL WADI AL KABIR</b>		
<b>Class: XI</b>	<b>Department: SCIENCE 2023 – 24</b> <b>SUBJECT: ENGINEERING GRAPHICS</b>		<b>Date of submission:30.04.2023</b>
<b>Worksheet No: 1</b> <b>WITH ANSWERS</b>	<b>UNIT 1: RECTILINEAR FIGURES</b>		<b>Note:</b> <b>A4 FILE FORMAT</b>
<b>NAME OF THE STUDENT</b>		<b>CLASS &amp; SEC: XI C/E</b>	<b>ROLL NO.</b>

**MULTIPLE CHOICE QUESTIONS**

1. To show the hidden edges which type of line is used?
  - a) Continuous thick line
  - b) Centre line
  - c) Dashed line
  - d) Hatching line
  
2. In Metric system the standard-length measure is -----
  - a) Yard
  - b) Meter
  - c) Centimeter
  - d) Millimeter

3. Continuous thick line is used to denote -----

- a) Visible edges
- b) Axis line
- c) Leader line
- d) Projection line

4. The axis of a circle is denoted by which type of lines-----

- a) Continuous thick lines
- b) Centre line
- c) Continuous thin lines
- d) Double dashed lines

5. Mini drafter is a combination of -----

- a) Scale and compass
- b) Compass and divider
- c) Scale and protractor
- d) Protractor and compass

6. In an equilateral triangle all angles are equal to -----

- a) 45 degree
- b) 60 degree
- c) 90 degree
- d) 120 degree

7. The size of a A2 drawing sheet is -----

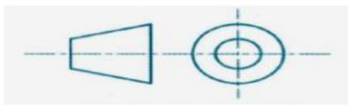
a) 841 x 1189

b) 594 x 841

c) 420 x 594

d) 210 x 297

8. Identify the symbol of first angle projection



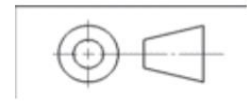
a)



b)

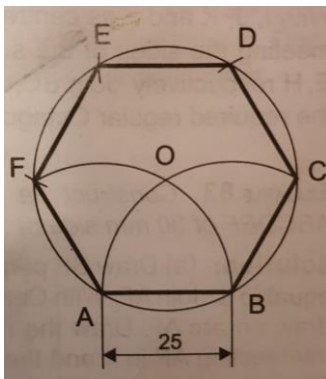


c)



d)

9.



Identify the polygon in the given figure?

a) Pentagon

b) Hexagon

c) Octagon

d) Trapezium

10. Match the LIST I with LIST II

List I – Name of the figure	List II – No: of sides
1. Triangle	i.5
2. Pentagon	ii.4
3. Square	iii.8
4. Octagon	iv.3

- (a) 1-iii, 2-iv, 3-i, 4-ii  
(b) 1-i, 2-iii, 3-ii, 4-iv  
(c) 1-iv, 2-i, 3-ii, 4-iii  
(d) 1-ii, 2-i, 3-iv, 4-iii

**DESCRIPTIVE TYPE QUESTIONS**

1. Construct a regular hexagon on a baseline of 40 mm.
2. Construct a Right-angled Triangle ABC, having its hypotenuse AC = 60 mm and altitude AB = 40 mm.
3. Construct an Isosceles Triangle QPR, having each of its sides = 50mm and base = 40 mm.
4. Construct an equilateral triangle of 40 mm sides.
5. Construct a Triangle ABC, having its base BC=50mm, side AB=40mm, and side AC=60mm.
6. Construct a rectangle ABCD having its base AB = 60 mm and its side AD = 40 mm.

7. Construct a Trapezion or Kite ABCD, having its diagonal AC=50mm, its adjacent sides AD and AB each equal to 30mm and CD and CB equal to 40mm.

8. Construct a regular pentagon with base side = 30 mm.

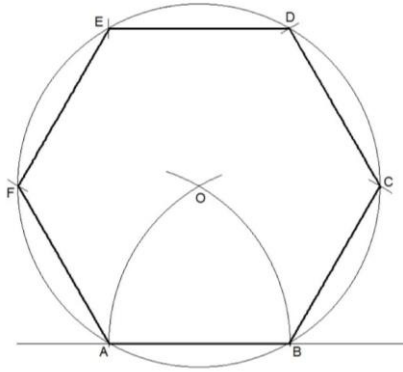
9. Construct a square of 50 mm sides

10. Divide a straight-line AB, proportionate to seven equal parts.

<b>ANSWER KEY – MULTIPLE CHOICE QUESTIONS</b>	
1	c. Dashed lines
2	b. Meter
3	a. Visible edges
4	b. Centre lines
5	c. Scale and protractor
6	b. 60 degree
7	c. 420 X 594
8	a.
9	b. Hexagon
10	c. 1-iv, 2-i, 3-ii, 4-iii

## Answers – Descriptive Type Questions

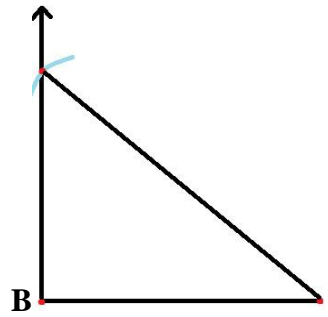
1.



(Hint: On a base line AB cut arcs equally with 30 mm and draw a circle with center O and radius OA, cut arcs equally on the circle, join all points.).

2.

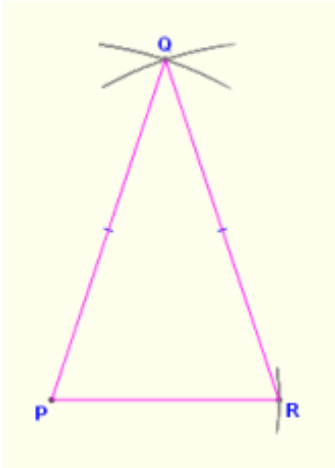
A



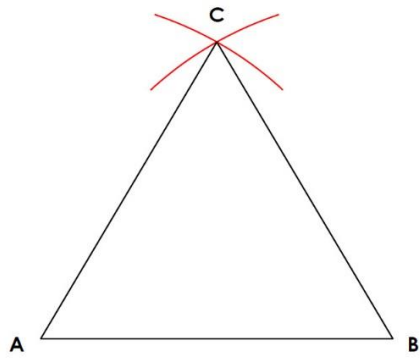
B C (Hint: construct perpendicular from B,  $AB = 40$ ,  $AC = 60$ )

3.

(Hint:  $QP = QR = 50$  mm,  $PR = 40$  mm)

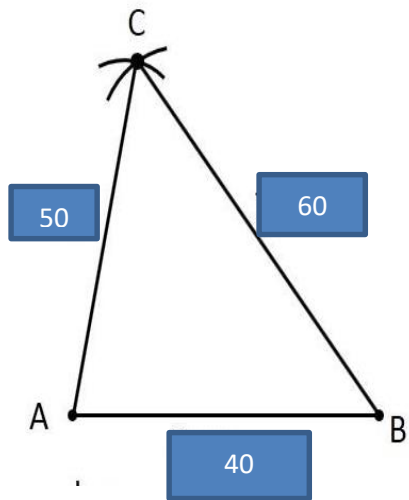


4.



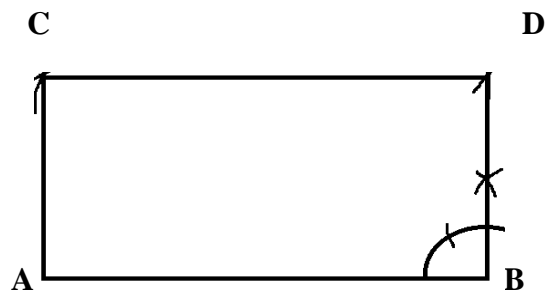
(Hint:  $CA = AB = CB = 40$  mm)

5.



(Hint:  $AB = 40$ ,  $AC = 50$ ,  $BC = 60$ , using compass)

6.

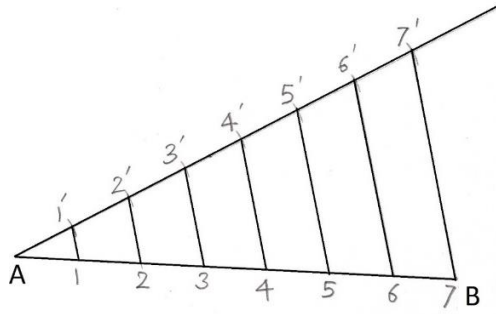


(Hint:  $AB = 60$ ,  $AD = 40$ , Construct perpendicular from both points A and B).





10.



(Hint: Using Copy angle method)

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