

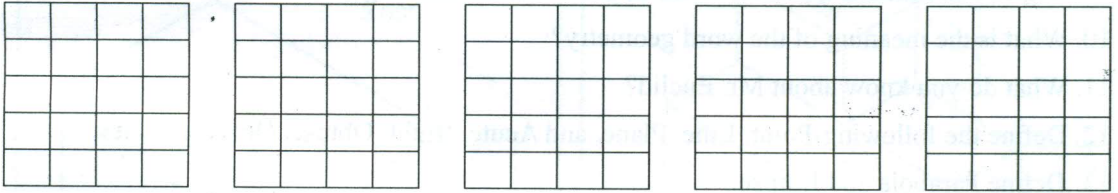
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Chapter 7

Sample Questions and Exercises

7.1 Some Sample Questions to Practice

1. Draw the following letters and numbers A, D, S, 4, 7 [15 Marks]



2. Indicate True or False (Negative one for each wrong answer) [4 Marks]

- a) Included angles between two adjacent arms of hexagon and pentagon are equal
- b) Minor and Major axes of an ellipse could be equal

3. Circle all the correct answers for the following [4 Marks]

a) Included angle between two adjacent arms of Octagon is

(i) 145 (ii) 135 (iii) 130 (iv) 155 (v) none of these

b) Horizontal cut of a Pyramid produces a

(i) circle (ii) rectangle (iii) square (v) none of these

4. Draw development of a solid box that is 1.5 inches high, 0.75 inches wide and one inch long (Draw to the scale and indicate the sides) [5 Marks]

5. Indicate True or False (Negative one for each wrong answer) [4 Marks]

c) Base of a Pyramid could not be a rectangle

d) Front view of a cylinder and prism could not be the same

6. Circle all the correct answers for the following [4 Marks]

c) Included angle between two adjacent arms of a Pentagon is

(i) 145 (ii) 135 (iii) 130 (iv) 108 (v) none of these

d) Horizontal cut of a 'Cone' produces a

(i) circle (ii) rectangle (iii) square (v) none of these

7. What are the six primary Orthographic views?

8. How many Orthographic views are needed to adequately depict the necessary information to illustrate a cylinder? (Hint: only two Orthographic views are needed).

9. To complete the drawing of a cylinder and a sphere how many dimensions are needed?

Ans: The diameter of the cylinder and its length are the only dimension information needed to complete the drawing. A sphere only needs the diameter. It is the same from all angles and remains a perfect circle in the isometric drawing

10. What is the meaning of the word geometry?

11. What do you know about Mr. Euclid?

12. Define the following-Point, Line, Plane, and Acute, Right, Obtuse, Oblique angles.

13. Define Parabola and Ellipse.

14. Define the System International [S I].

15. What is the meaning of the word Isometric?

16. Who gave the first correct explanation of vision, showing that light is reflected from an object into the eye, not from eye to object?

17. Who gave the first exposition of descriptive geometry and did the formalization of orthographic projection?

18. What are the two types of "Obliques"? What is the major difference between them?

19. What are the types of "Perspectives"?

20. What is drawn as ellipses on receding planes? (Ans. Circles in Oblique)

21. Describe various line types with figures.

22. Draw examples for conventional short and long break lines? When you should use the break lines?

23. Show the three ways of Dimensioning circles?

24. What should be the width and length ratio for a standard arrowhead?

25. Define "ISO", and "ANSI".

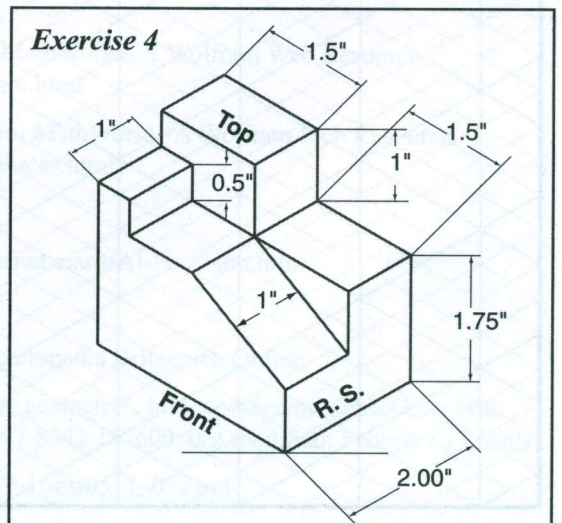
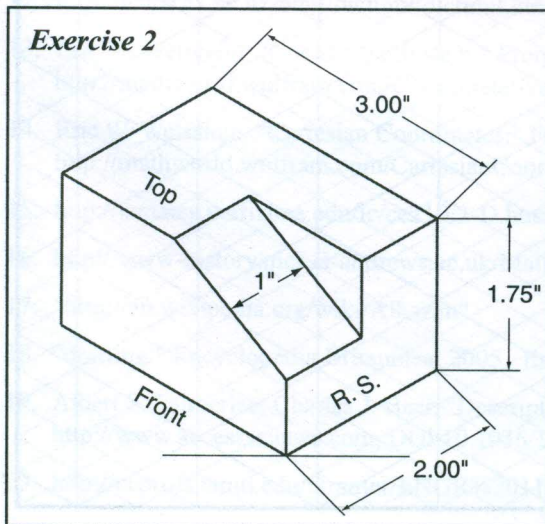
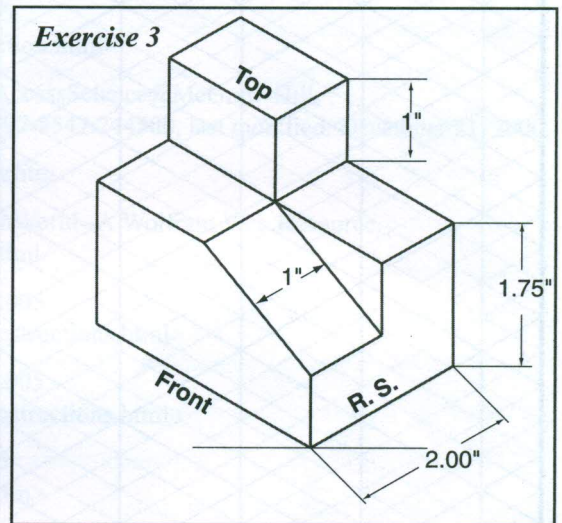
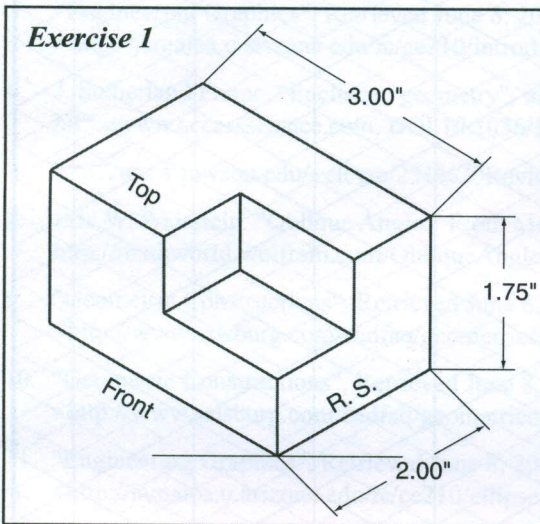
26. Define CAD, CADD, CADM, and CAE.

27. If you take a piece of paper (e.g. A4 size offset paper), and then hold it in front of you as

to put on a clip board (i.e. in vertical position), then draw with neat sketch the front view, the top view and the side view. How many dimensions do you need to describe these views? Regarding the top view and the side view, are they same?

7.2 Exercises on Generating Orthographic Views from Isometric Views

Draw Front view, Right side view and Top view for the following figures





7.3 Isometric Grid Work Sheet

