

30.21 DRAWING AND DESIGN (449)



MANYAM FRANCHISE
Discover! Learn! Apply

30.21.1 Drawing and Design Paper 1 (449/1)

1. (a) It will not add value to the drawing since it would produce the same view as the one initially used though in reverse directions. (1 x 1)
 - (b) The tape:
 - (i) tends to peel the top layer of the drawing paper
 - (ii) is expensive (2 x ½)
 2. (a) Salary is payment made after a predetermined period/duration and is taxable. Wage is payment to short term worker usually daily or weekly (2 x 1)
 - (b) DESIGN: a process of converting an idea into pictorial or drawing form (1 x 1)
- Factors to consider –function
-aesthetics (2 x ½)

3.

(a)



Leader lines



Projection lines

(b)

DEFINITIONS

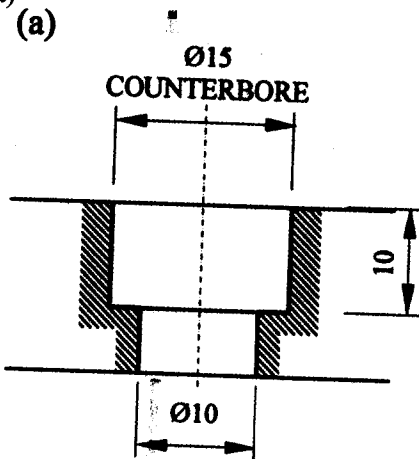
PLASTICITY: the ability of materials to deform and retain its new shape when load is removed.

ELASTICITY: the ability of materials to deform under load and return to its original shape, when load is removed. (x 1)

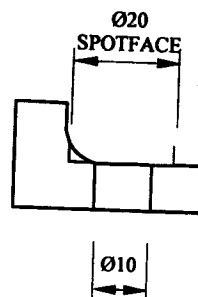
4.

CONVENTIONS

(a)

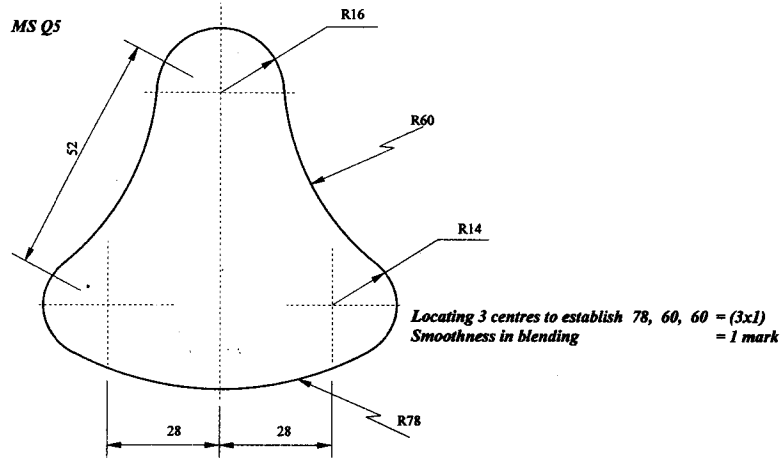


(b)



Counter bore $4 \times \frac{1}{2} = 2$
Spot face $4 \times \frac{1}{2} = 2$
TOTAL = 4

5.



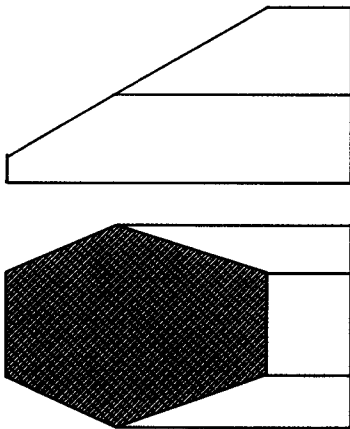
6.

(a)

- (i) = 0.625
(ii) = 0.11
(iii) = 0.75

3 x 1

(b)



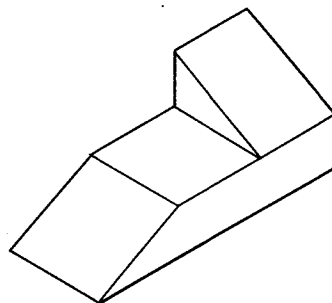
END ELEVATION

2 faces (2 x ½) = 1
Hatching = ½

PLAN

4 faces (4 x ½) = 2
Hatching = ½
TOTAL = 4

7.

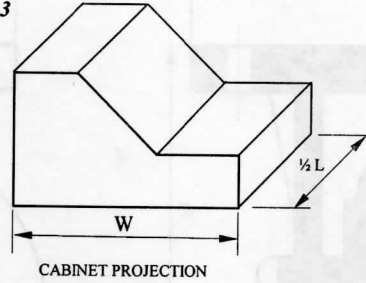
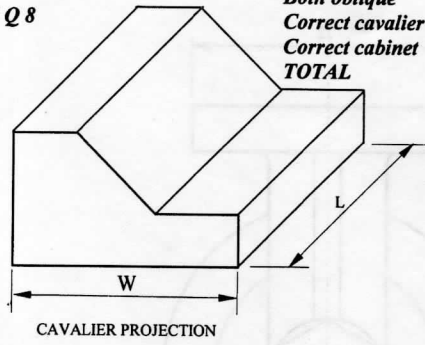


5 faces x ½ = 2 ½
Correct lowest point X = ½
TOTAL = 3

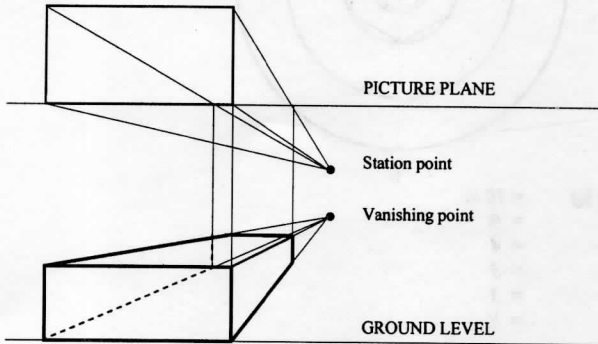
8.

MS Q 8

Both oblique = 1
Correct cavalier = 1
Correct cabinet = 1
TOTAL = 3



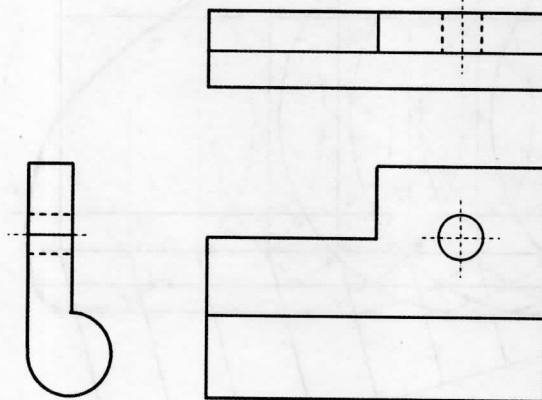
9.



Correct sketch = 1
Picture plane = 1/2
Station point = 1/2
Vanishing point = 1/2
Ground level = 1/2
TOTAL = 3

GROUND LEVEL
The sketch could vary but the concept should be correct

10.



F. E.

3 faces x 1/2 = 1 1/2
Hidden details = 1/2

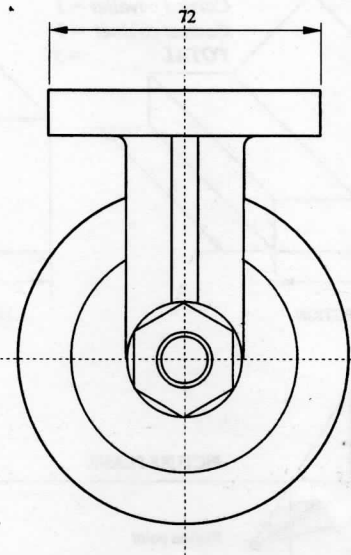
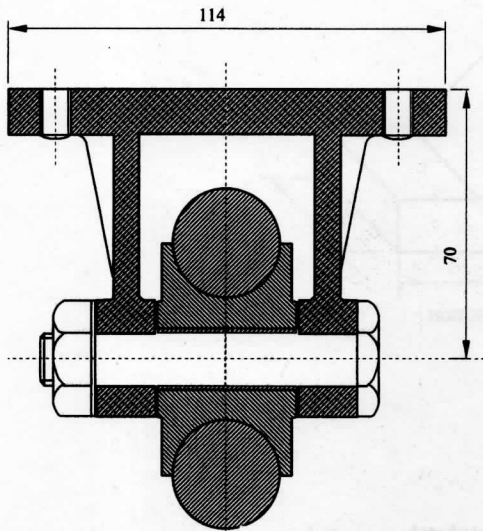
E. E.

2 faces x 1/2 = 1
Hidden details = 1/2

F. E.

3 faces x 1/2 = 1 1/2
Hidden details = 1/2
3rd angle projection = 1/2
TOTAL = 6

11.



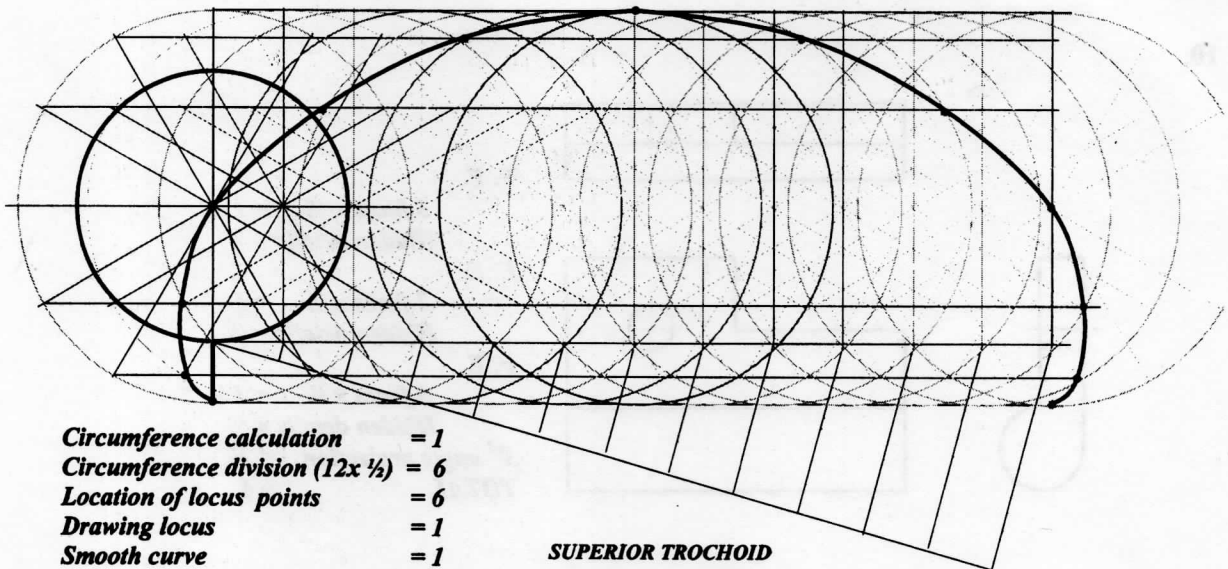
Correct assembly

Front elevation 7 parts (7x1 ½)	= 10 ½
End view 6 parts (6x1 ½)	= 9
Hatching (4x1)	= 4
Centre lines (3x1)	= 3
Dimensioning (3x1)	= 3
Neatness ½	= ½

TOTAL

= 30

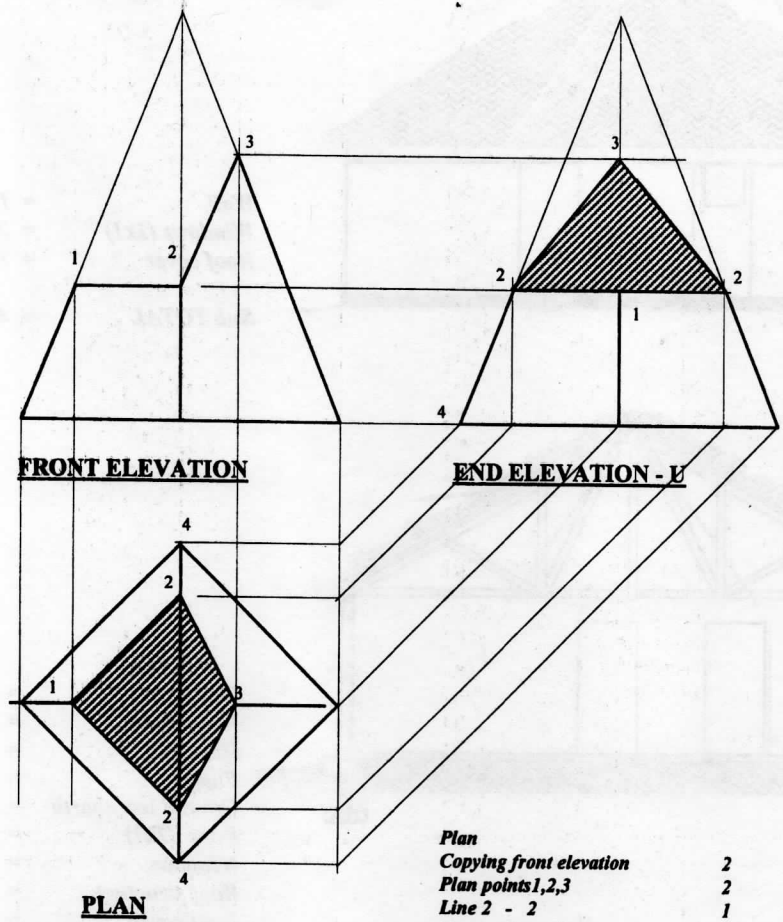
12.



Circumference calculation	= 1
Circumference division (12x ½)	= 6
Location of locus points	= 6
Drawing locus	= 1
Smooth curve	= 1
TOTAL	= 15

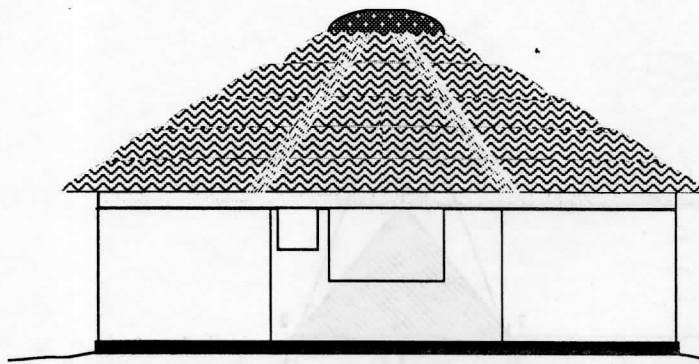
SUPERIOR TROCHOID

13.



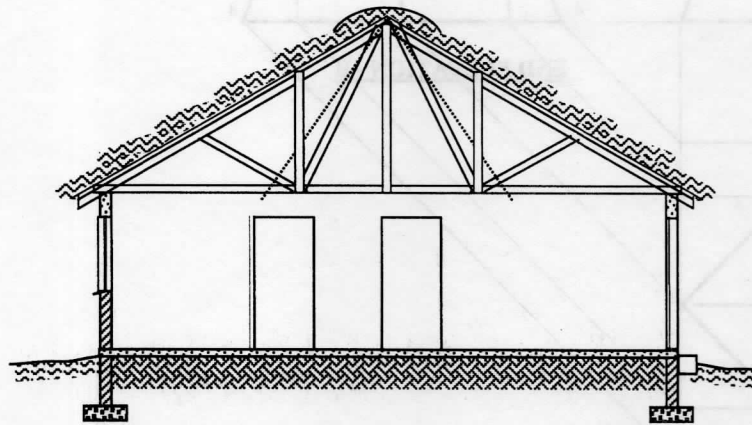
Plan	
Copying front elevation	2
Plan points 1,2,3	2
Line 2 - 2	1
Connecting points	2
Hatching	2
End elevation	
Points 1,2,3,2	2
Connecting points	1 ½
Hatching	1 ½
Points /line 4 - 4	1
TOTAL	15

14.



ELEVATION A

Wall	= 1
Windows (2x1)	= 2
Roof cover	= 1
Sub TOTAL	= 4



SECTION X - X

Wall	= 1
Foundation	= 1
Hardcore	= 1
Floor	= 1
Ground level/earth	= 1
Door (2x1)	= 2
Windows	= 1
Roof structure	= 1
Roof cover	= 1
Battens and purlins	= 1
Sub TOTAL	= 11

GRAND TOTAL = 15