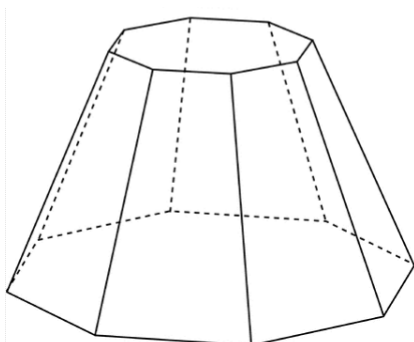


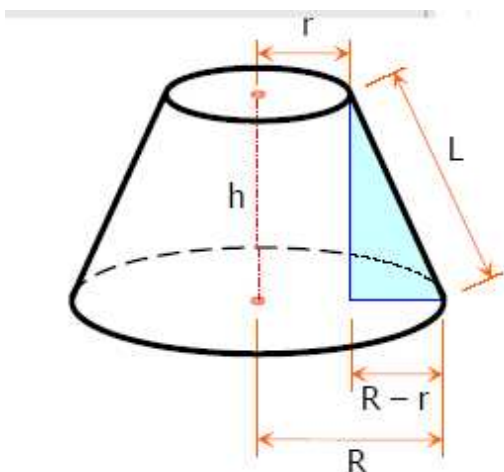
Name:.....Nº:.....course:.....

- 1) The side of a regular pentagon is 10 cm.
 - a) Find the measure of the apothem.
 - b) Find its area.

- 2) Find the volume of a octagonal pyramid frustum with a bottom base of side 12 m, a top base of side 8 m and a height of 5 m.



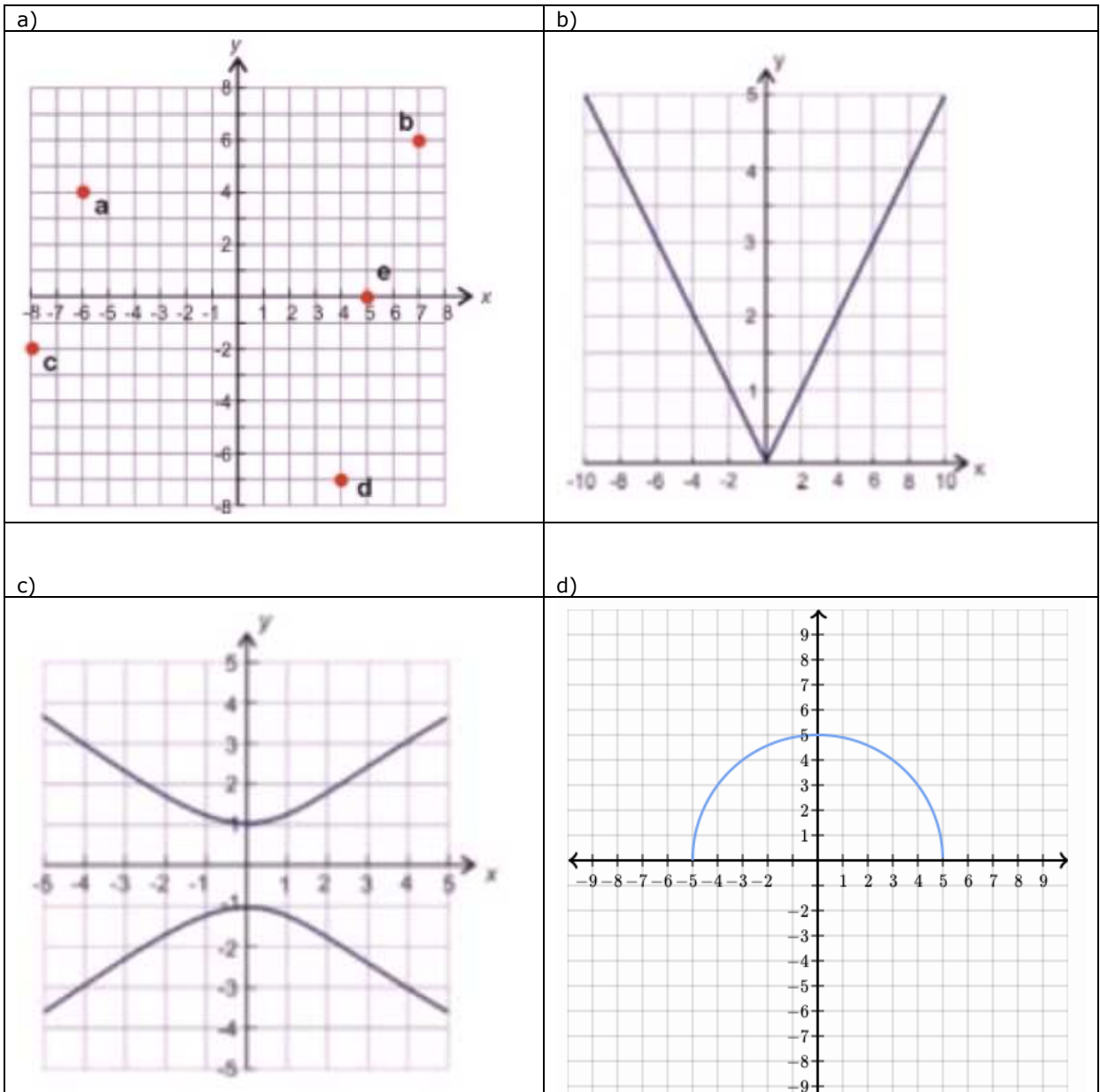
- 3) Find the volume of a frustum of a cone with a bottom of radius = 35 cm and a top of radius = 20 cm. The most acute angle formed in the shaded triangle is of 20º.



- 4) Find the domain of the following functions:
 - a) $f(x) = x^3 - 2x^2 + 5x - 1$
 - b) $f(x) = \frac{5x^2 - 2}{x^2 - 4x}$
 - c) $f(x) = \frac{-1}{x(x-1)(x+2)}$

- 5) If $f(x) = 2x^2 - 4$ and $g(x) = -5x - 6$
 - a) find $f(g(x))$
 - b) find $g(f(x))$
 - c) find x when $f(f(x)) = 3$

6) Which of the following relations are functions?. Find the domain and range only for those that are functions.



7) Write: Definition of function.

1	2	3	4	5	6	7
1	2	2	1,5	1,5	1,5	0,5