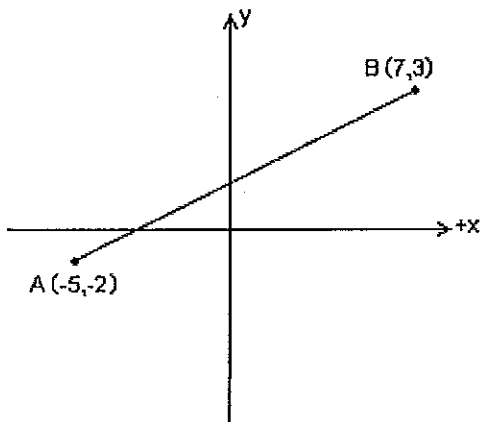


Exercise – GRAPHS

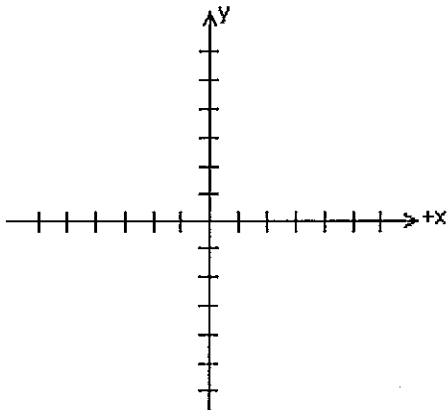
Name: _____

1. Find (a) the Mid-point of AB =
(b) the Length of AB =
(c) the Gradient of AB =



2. Sketch the graph of :-

$$2x - 3y = 9$$



3. What is the gradient of the line:-
 $3x + 5y - 15 = 0$

4. Find the equation of the line through
P=(2,-5) with gradient $m = -3$

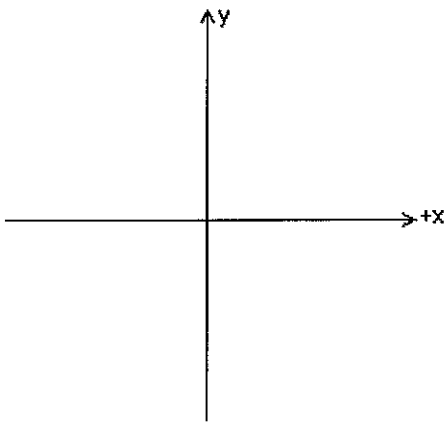
5. Find the equation of the line passing
through P=(-2,4) and Q=(8,-1)

6. Find the equation of the line passing
through A=(3,-5) which is perpendicular
to: $3x + y = 11$

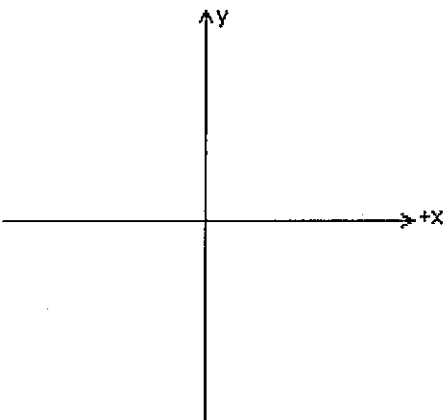
7. In $\triangle ABC$, A=(4,8) B=(1,-2) & C=(6,0)
If M and N are the mid-points of AB and
AC respectively, prove that MN is
parallel to BC. (draw a diagram!)

8. Sketch the graphs of the following equations:-

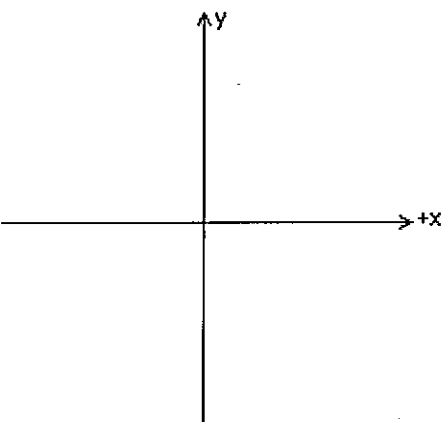
(a) $y = \frac{-6}{x}$



(b) $y = x^2 - 9$

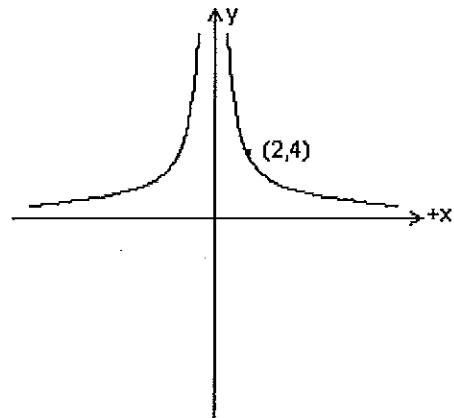


(c) $\frac{x^2}{16} + \frac{y^2}{36} = 1$



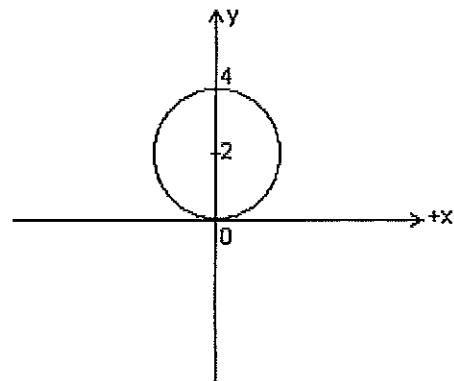
9. What is the equation of the following graphs ?

(a)



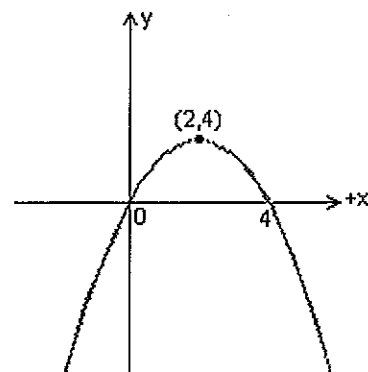
Equation is:

(b)



Equation is:-

(c)



Equation is:-

Solutions – GRAPHS

1. a) $M = (1, \frac{1}{2})$ b) $AB = 13$ c) $m = \frac{5}{12}$

2. Cuts x -axis at $x = 4.5$ and y -axis at $y = -3$

3. $m = -\frac{3}{5}$

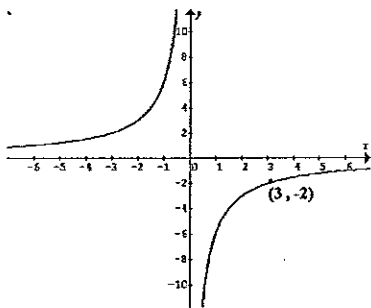
4. $3x + y - 1 = 0$

5. $x + 2y - 6 = 0$

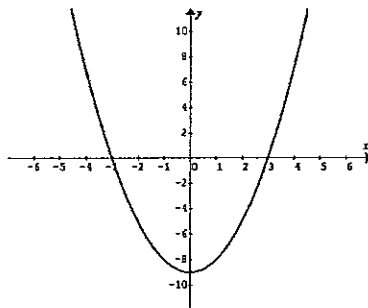
6. $x - 3y - 18 = 0$

7. $m_{BC} = \frac{2}{5}$ and $m_{MN} = \frac{2}{5}$ So parallel.

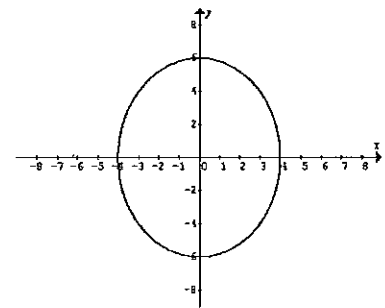
8. a)



b)



c)



9. a) $y = \frac{16}{x^2}$

b) $x^2 + (y - 2)^2 = 4$

c) $y = 4x - x^2$