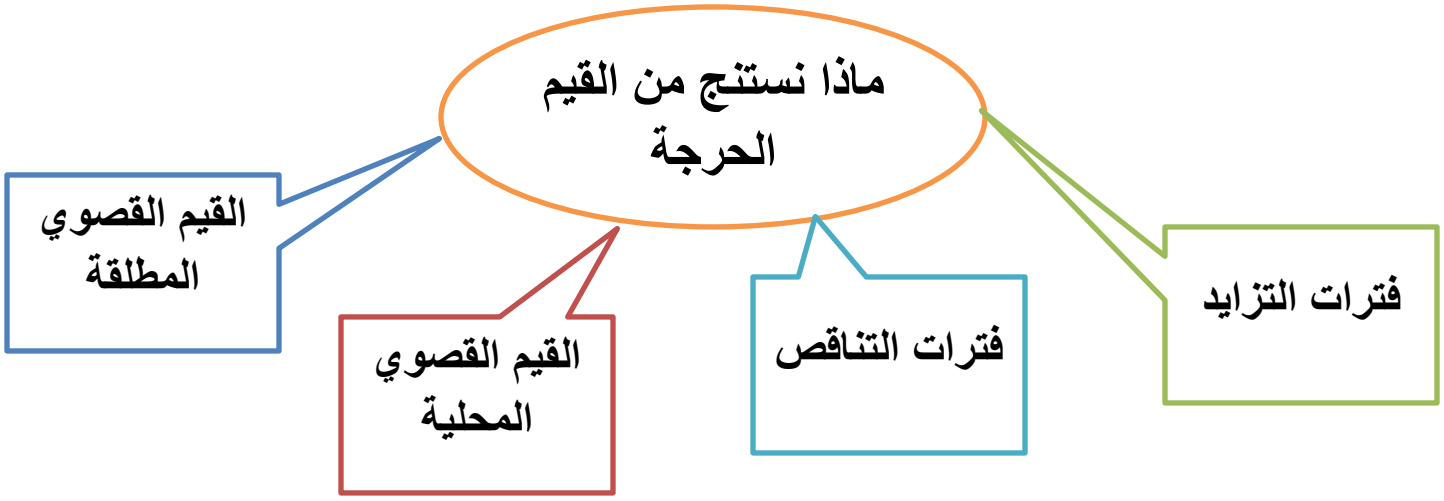
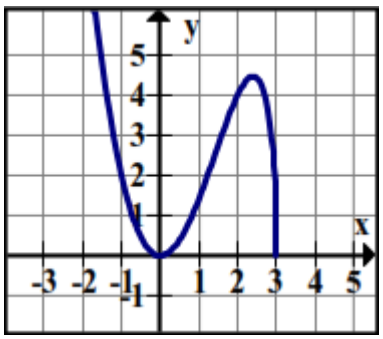
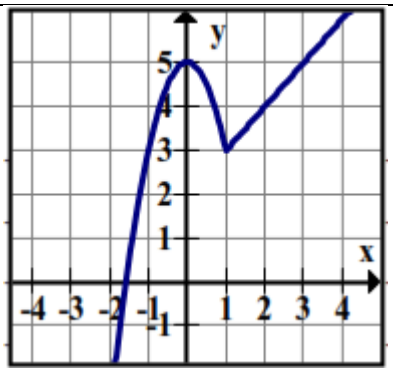
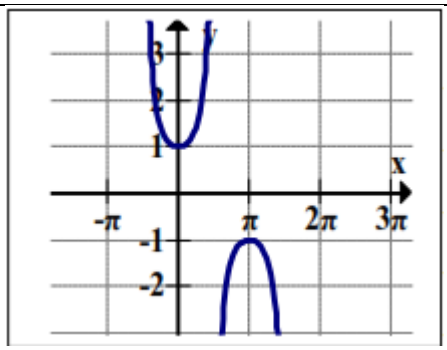
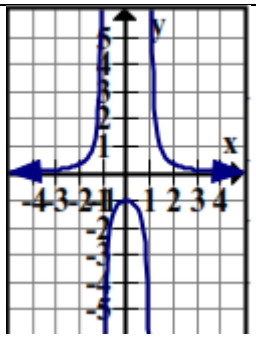
النقطة الحرجة لدالة f هي نقطة في مجالها يكون عندها $f' = 0$ أو f' غير موجودة



أوجد النقاط الحرجة للدوال الأتية:

1		2	
3		4	

$f(x)=1+\sin x$	5
$f(x)=x^3-3x^2+2$	6
$f(x)=x^{2/3}$	7
$f(x)=x^{3/5}$	8
$f(x)=\frac{1}{x^2}$	9
$f(x)=\sqrt{-x^2+4x-3}$	10
$f(x)=\frac{1}{\sqrt{4-x^2}}$	11

$y = \frac{1}{\sqrt{1-x^2}}$	12
$y = 2x^2 - 8x + 9$	13
$y = x^3 + x^2 - 8x + 5$	14
$y = \frac{x}{x^2+1}$	15
$y = \frac{1}{x^2-1}$	16
$y = \sqrt{x^2-1}$	17

$y = x^{2/3}(x+2)$	18
$y = x^2\sqrt{3-x}$	19
$y = \begin{cases} 5-2x^2 & , x \le 1 \\ x+2 & , x > 1 \end{cases}$	20
$y = x^4 - 72x^2 - 17$	21

$G(x) = \frac{x}{9 + x^2}$	22
$g(x) = x - 2 + \frac{9}{x-2}$	23
$y = \begin{cases} 3-x & , x < 0 \\ 3+2x-x^2 & , x \geq 0 \end{cases}$	24