

BCM SCHOOL BASANT AVENUE DUGRI ROAD LUDHIANA CLASS XI MATHS ASSIGNMENT		
1	If $f(x) = x \sin x$ , then $f'(\frac{\pi}{2})$ is equal to (A)0 (B)2 (C)-1 (D)1	1
2	$\lim_{x \rightarrow 0} \frac{\sin x}{x(1+\cos x)}$ is equal to (A)0 (B)1 (C)-1 (D) $\frac{1}{2}$	1
3	It $y = \frac{(1-\tan x)}{(1+\tan x)}$ . Show that $\frac{dy}{dx} = \frac{-2}{(1+\sin 2x)}$	2
4	Evaluate $\lim_{x \rightarrow 4} \frac{ 4-x }{x-4}$ (if it exist)	2
5	Differentiate the function $y = \frac{(x+2)(3x-1)}{(2x+5)}$ with respect to $x$	2
6	Evaluate $\lim_{h \rightarrow 0} \frac{(a+h)^2 \sin(a+h) - a^2 \sin a}{h}$	3
7	(i) Differentiate $(2x - 7)^2 (3x + 5)^3$ w.r.t $x$ Evaluate the limit: $\lim_{y \rightarrow 0} \frac{(x+y) \sec(x+y) - x \sec x}{y}$ (ii)	4