E050 Online Test

Ref104

The answer of the following is

$(2X^2=4X+1)\ (3X^3-X^2-2)$

A	$3X^6-2X^5+12X^4-3X^3+X^2+8X+2$	B	$6X^6-2X^5-12X^4+3X^3-X^2+8X-2$
C	$X^6+X^5+6X^4+3X^3+X^2-8X-2$	D	
	Answer		

Ref107

The answer of the following equation is

$$\frac{2t-3}{25} = \frac{4}{2t-3}$$

A	2/ 13	B	13
C	6	D	13/2
	Answer		

Ref110

The answer of the following

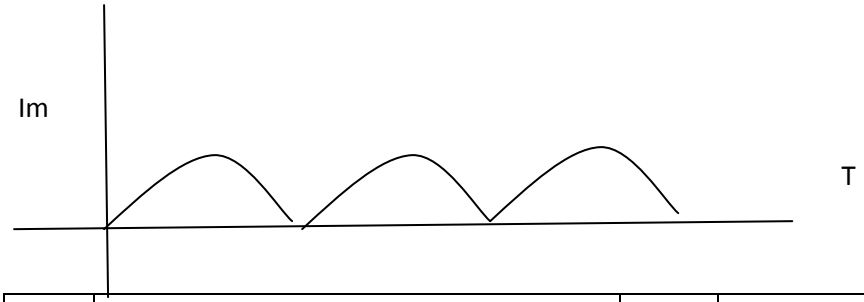
$\int \text{Sin } 3X \text{ Cos } 7X \, dx$ is

A	1/20 cos 20X + 1/ 8 sin 4X	B	1/10 cos 10X - 1 /8 sin 4x
C	cos 10X + sin X	D	-1/20 cos 10X + 1/8 cos 4X
	Answer		

Ref113

The average value of the following waveform is

I (wt)



A	0.636Im	B	0.5Im
C	0.707Im	D	1.4142Im
	Answer		

Ref116

$\text{Log}_{10}\ K / (K - X) = t$ Find X

A	$X = \dfrac{K \times 10^{t}}{10^{t} - 1}$	B	$X = \dfrac{K\,(10^{t} - 1)}{10^{t}}$
C	$X = K \times 10^{t}$	D	$X = \dfrac{K}{10^{t}}$
	Answer		

Ref119

Find period and angular velocity of

30MHz are

A	0.033 µs , 188.4 x 10^{6} rad/s	B	0.33 µs , 188 x 10^{3} rad/s
C	0.3 ms , 188.4 x 10^{3} rad/s	D	0.3s , 188.4rad/s
	Answer		

Ref122

Sin (A+B)

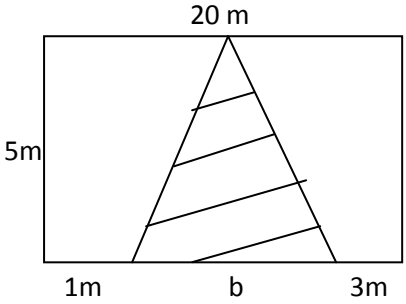
---------- is equal to

Cos (A-B)

A	$\frac{1+\tan A \tan B}{\tan A+\tan B}$	B	$\frac{\tan A+ \tan B}{1+\tan A\tan B}$
C	$\frac{\tan A- \tan B}{1-\tan A\tan B}$	D	$\frac{\tan a- \tan B}{1+\tan A\tan B}$
	Answer		

Ref125

Find the areas of the following shadings



A	20 m^2	B	30 m^2
C	90 m^2	D	45 m^2
	Answer		

Ref128

d cos 3 Θ

---------- is equal to

d Θ

A	-sin3 Θ	B	-3sin3 Θ
C	3sinΘ	D	Cos3nΘ
	Answer		

Ref131

$Y = (X+1)^2 (X+3)^3$, dy/ dx is equal to

A	$3(X+1)^2 (X+3)^2+2 (X+3)^3 (X+1)$	B	$(X+1) (X+3)^2+ (X+3)^2 (X+1)^3$
C	$3(X+1)^2 (X+3)^3+2 (X+3) (X+1)^2$	D	$3(X+2) (X+1)+3 (X+3) (X+1)^2$
	Answer		

Ref134

If $Y = X^3 +3 X^2 +4$

dy/dx, d^2y/dx^2 and d^3y/ dx^3 are

A	$3X^2 +6X,$ 6X+6, 6	B	$X^2 +X,$ 6X+6, 0
C	$3X^2,$ 6X+6, 6	D	3X+6, 6 , 0
	Answer		

Ref136

The answer of e^{ax}

$$\int \frac{e^{ax}}{e^{ax}+a}\,dx \quad \text{is}$$

A	1/a Ln (e^{ax}+a)	B	a Ln (e^{ax}+a)
C	Ln (e^{ax}+a)	D	1/a
	Answer		