

E050 Online Test

Ref102

The degree of the following polynomial is

$$3X^{15} + 7.6X^8 - 4X^2$$

A	15	B	8
C	c	D	4
Answer			

Ref105

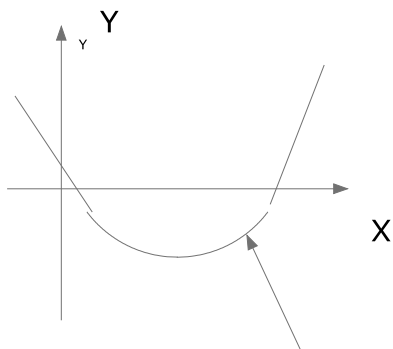
The factors of the followings are

$$X^2 + 4X + 3$$

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

Ref108

Axis of symmetry, X axis crossing point and Y axis crossing point of the given graph are



A	$(3,-5)(0,3)(5.5,0.5)$	B	$(5,-3)(3,0)(0.5,5.5)$
C	$(0,0)(3,3)(5,0.5)$	D	$(3,-5)(1,2)(5.5,0.5)$
Answer			

Ref109

The answer of

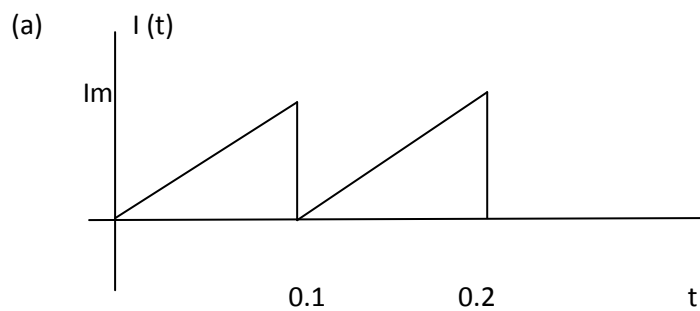
$$\int \sin^2 3X dX$$

is

A	$X/3 - \sin 6X + C$	B	$X^2 - \sin 3X + C$
C	$X/2 - 1/12 \sin 6X + C$	D	$X - 12 \sin 6X + C$
Answer			

Ref112

The average value of the following waveform is



A	$I_m / 3$	B	$I_m / 6$
C	$I_m / 12$	D	$I_m / 2$
Answer			

Ref117

$\sin (180 - \theta)$ is

A	$-\sin \theta$	B	$\sin \theta$
C	$\cos \theta$	D	$-\cos \theta$
Answer			

Ref121

$\cos(\alpha - \beta)$ is equal to

A	$\cos \alpha \cos \beta + \sin \alpha \sin \beta$	B	$\cos \alpha \sin \beta + \sin \alpha \cos \beta$
C	$\sin \alpha \sin \beta - \cos \alpha \cos \beta$	D	$\sin \alpha \cos \beta + \cos \alpha \sin \beta$
Answer			

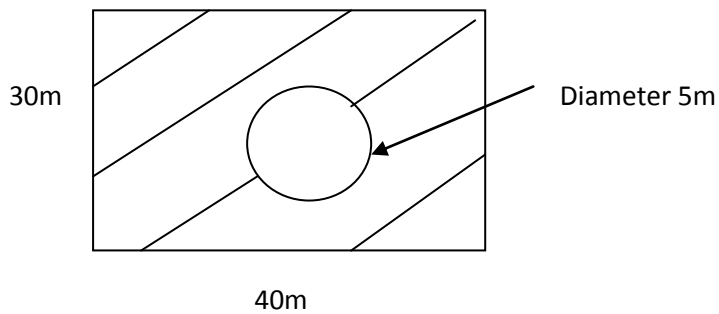
Ref124

If a body undergoes a displacement in 12 km due north followed by a displacement of 5 km due east. Find the displacement and direction.

A	13, 22.6 deg	B	17, 0 deg
C	7, 90 deg	D	13, 90 deg
Answer			

Ref126

Find the area of shading



A	900 m^2	B	200 m^2
C	1196.85 m^2	D	450 m^2
Answer			

Ref129

The differential of $Y = 5X^3 + 6X^2 + 7$ is equal to

A	$X^2 + 3X$	B	$15X + 2$
C	$15X^2 + 12X$	D	$12X^2 + 15X$
Answer			

Ref133

Differential of $d/dx (\text{Log}_e X^2)$ is

A	$1/X$	B	$2/X$
C	X^2	D	$1/X^2$
Answer			

Ref136

The answer of e^{ax}

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

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