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<b>Started on</b>	Wednesday, 10 May 2017, 3:00 PM
<b>State</b>	Finished
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<b>Time taken</b>	55 mins 16 secs
<b>Grade</b>	<b>100.00</b> out of 100.00

**Question 1**

Correct

Mark 100.00 out of 100.00

## Quiz 12a

Given the compact trigonometric form is

$$f(t) = a_v + \sum_{n=1}^{\infty} A_n \cos(n\omega_0 t - \theta_n)$$

The Fourier coefficients for a function  $f(t)$  were found to be:

$$a_v = 0 \quad a_n = \frac{24}{n^2 \pi^2} \quad b_n = \frac{12}{n \pi}$$

Find the following coefficients in the compact trigonometric form for this function.

$$A_1 = \boxed{4.51} \checkmark$$

$$\text{at angle } \theta_1 = \boxed{57.47} \checkmark \text{ }^\circ \text{ (Degrees)}$$

$$A_2 = \boxed{2.003} \checkmark$$

$$\text{at angle } \theta_2 = \boxed{72.36} \checkmark \text{ }^\circ \text{ (Degrees)}$$

$$A_3 = \boxed{1.298} \checkmark$$

$$\text{at angle } \theta_3 = \boxed{77.99} \checkmark \text{ }^\circ \text{ (Degrees)}$$

**Numeric Answer**

$A_1 = 4.528$  at angle  $57.52^\circ$

$A_2 = 2.004$  at angle  $72.34^\circ$

$A_3 = 1.3016$  at angle  $78.02^\circ$

**Correct**

Marks for this submission: 100.00/100.00.

