Started on	Wednesday, 19 October 2016, 11:02 AM
State	Finished
Completed on	Wednesday, 19 October 2016, 11:28 AM
Time taken	26 mins 24 secs
Grade	**100.00** out of 100.00

Question 1

Correct

Mark 100.00 out of 100.00

Quiz 6a

$$-5+\frac{V_1-V_2}{0-j8}+\frac{V_1-(0+j20)}{0-j4}=0$$

$$\frac{V_2-V_1}{0-j8}+\frac{V_2}{0+j4}+\frac{V_2-(0+j20)}{12}=0$$

Given this set of linear equations, use Matlab (or other software) to find:

$\mathbf{V_1}$ = -2.67 ✓ + j 1.33 ✓ Volts

$\mathbf{V_2}$ = -8 ✓ + j 4 ✓ Volts

Express these two results in polar form with a positive valued angle which is less than 180°.

$\mathbf{V_1}$ = 2.98 ✓ at angle 153.435 ✓ ° (Degree) Volts

$\mathbf{V_2}$ = 8.94 ✓ at angle 153.435 ✓ ° (Degree) Volts

Numeric Answer
$\mathbf{V_1}$ = -2.667 + j 1.333 Volts = 2.981 at angle 153.43° Volts
$\mathbf{V_2}$ = -8.000 + j 4.000 Volts = 8.944 at angle 153.43° Volts

Correct

Marks for this submission: 100.00/100.00.