





## Pre-Calculus Multiple Choice Questions - Chapter A3

25 Which of the following is the completed square version of this quadratic equation?

$$y = x^2 + 6x - 7$$

a  $y = (x + 3)^2 - 2$

c  $y = (x + 3)^2 + 2$

b  $y = (x - 3)^2 - 16$

d  $y = (x + 3)^2 - 16$

	<b>A3.3</b>
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26 Which of the following is the completed square version of this quadratic equation?

$$y = x^2 + 4x + 1$$

a  $y = (x + 2)^2 - 3$

c  $y = (x - 2)^2 - 3$

b  $y = (x + 2)^2 + 3$

d  $y = (x - 2)^2 + 3$

	<b>A3.3</b>
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27 Which of the following is the completed square version of this quadratic equation?

$$y = x^2 - 4x + 6$$

a  $y = (x - 2)^2 + 2$

c  $y = (x - 2)^2 - 2$

b  $y = (x + 2)^2 - 2$

d  $y = (x + 2)^2 + 2$

	<b>A3.3</b>
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## Pre-Calculus Multiple Choice Questions - Chapter A3

1 Solve the following complicated equation

$$2x = \sqrt{100 - 12x} - 2$$

- a  $x = 3$   
c  $x = -8$

- b  $x = 3, x = -8$   
d No Solution

	<b>A3.4</b>
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2 Solve the following complicated equation

$$\sqrt[3]{(x-5)^2} + 14 = 50$$

- a  $x = 221, x = -211$   
c  $x = -221, x = -211$

- b  $x = 221$   
d  $x = -211$

	<b>A3.4</b>
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3 Solve the following complicated equation

$$\sqrt{x-2} = 5 - \sqrt{15-x}$$

- a  $x = 6$   
c  $x = 6, x = 11$

- b  $x = -6, x = -11$   
d  $x = 11$

	<b>A3.4</b>
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## Pre-Calculus Multiple Choice Questions - Chapter A3

31 Factor the following expression  
 $x^2 + 2x + 1$

a  $(x + 1)(x + 1)$

c  $(x - 1)^2$

b  $(x - 1)(x + 1)$

d  $(x - 1)(x - 1)$

	<b>A3.5</b>
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32 Factor the following expression  
 $2x^2 + 5x - 18$

a  $(2x - 9)(x + 2)$

c  $(2x + 9)(x + 2)$

b  $(2x - 9)(x - 2)$

d  $(2x + 9)(x - 2)$

	<b>A3.5</b>
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33 Factor the following expression  
 $x^4 - 11x^2 + 28$

a  $(x^2 + 7)(x + 2)(x - 2)$

c  $(x^2 - 7)(x - 2)^2$

b  $(x^2 - 7)(x + 2)(x - 2)$

d  $(x^2 - 7)(x + 2)^2$

	<b>A3.5</b>
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