- (1) What are the solutions to the equation  $x^2 + 20x = 56$ ?
- (1)  $x = -10 \pm 2\sqrt{11}$
- (2)  $x = 10 \pm 2\sqrt{11}$ (3)  $x = -10 \pm 2\sqrt{39}$
- (4)  $x = 10 \pm 2\sqrt{39}$

- (2) Which equation has the same solution as  $x^2 16x + 35 = 0$
- $(1) (x+8)^2 = 99$   $(2) (x+8)^2 = 29$   $(3) (x-8)^2 = 99$   $(4) (x-8)^2 = 29$

(3) The method of completing the square was used to solve the equation  $3x^2 + 48x + 183 = 0$ . Which equation is a correct step when using this method?

$$(1) (x+8)^2 = -119$$

$$(2) (x-8)^2 = 119$$

$$(3) (x+8)^2 = 3$$

$$(4) (x-8)^2 = -3$$

$$(2)(x-8)^2 = 119$$

$$(3)(x+8)^2 = 3$$

$$(4)(x-8)^2 = -3$$

(4) When directed to solve a quadratic equation by completing the square, Sam arrived at the equation  $(x + \frac{9}{2})^2 = \frac{37}{4}$ . Which equation could have been the original equation given to Sam?

$$(1) x^2 + 9x + 21 = 0$$

(2) 
$$x^2 + 9x + 11 = 0$$

(2) 
$$x^2 + 9x + 11 = 0$$
  
(3)  $x^2 - 9x + 21 = 0$ 

$$(4) x^2 - 9x + 11 = 0$$