- (1) What are the solutions to the equation  $x^2 + 14x = -16$ ?
- (1)  $x = 7 \pm -\sqrt{33}$
- (1)  $x + 2 + \sqrt{65}$ (2)  $x = -7 \pm 1\sqrt{65}$ (3)  $x = -7 \pm -\sqrt{33}$ (4)  $x = 7 \pm 1\sqrt{65}$

- (2) Which equation has the same solution as  $x^2 18x + 64 = 0$

- $(1) (x+9)^2 = 145$   $(2) (x+9)^2 = 17$   $(3) (x-9)^2 = 17$   $(4) (x-9)^2 = 145$

(3) The method of completing the square was used to solve the equation  $4x^2 + 16x + 8 = 0$ . Which equation is a correct step when using this method?

$$(1) (x + 2)^2 = -4$$

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

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

$$(4) (x + 2)^2 = 2$$

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

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

$$(4)(x+2)^2 = 2$$

(4) When directed to solve a quadratic equation by completing the square, Sam arrived at the equation  $(x-\frac{5}{2})^2=\frac{69}{4}$ . Which equation could have been the original equation given to Sam?

$$(1) x^2 - 5x - 11 = 0$$

$$(1) x - 5x - 11 = 0$$

$$(2) x^{2} - 5x + 7 = 0$$

$$(3) x^{2} + 5x - 11 = 0$$

$$(4) x^{2} + 5x + 7 = 0$$

$$(3)$$
  $x^2 + 5x - 11 = 0$ 

(4) 
$$x^2 + 5x + 7 = 0$$