- (1) What are the solutions to the equation $x^2 12x = -33$?
- (1) $x = 6 \pm 1\sqrt{69}$
- (1) $x = 6 \pm 1\sqrt{3}$ (2) $x = 6 \pm 1\sqrt{3}$ (3) $x = -6 \pm 1\sqrt{69}$ (4) $x = -6 \pm 1\sqrt{3}$

- (2) Which equation has the same solution as $x^2 + 8x + 5 = 0$
- $(1) (x-4)^2 = 11$ $(2) (x+4)^2 = 21$ $(3) (x+4)^2 = 11$ $(4) (x-4)^2 = 21$

- (3) The method of completing the square was used to solve the equation $4x^2 + 8x 72 = 0$. Which equation is a correct step when using this method?
- $(1) (x+1)^2 = 19$ $(2) (x-1)^2 = -73$ $(3) (x-1)^2 = -19$ $(4) (x+1)^2 = 73$

- (4) When directed to solve a quadratic equation by completing the square, Sam arrived at the equation $(x+\frac{3}{2})^2=\frac{149}{4}$. Which equation could have been the original equation given to Sam?
- $(1) x^2 + 3x + 3 = 0$
- (2) $x^2 3x 35 = 0$ (3) $x^2 + 3x 35 = 0$
- $(4) x^2 3x + 3 = 0$