$$(1) \ x^2 + 10x = 9$$

$$(2) x^2 - 20x = -16$$

$$(3) x^2 - 18x = -59$$

$$(4) x^2 + 12x = -9$$

$$(5) x^2 + 18x = -49$$

$$(6) x^2 + 18x = -73$$

$$(7) x^2 - 16x + 61 = 0$$

$$(8) x^2 - 8x - 27 = 0$$

$$(9) x^2 - 8x + 5 = 0$$

$$(10) x^2 + 8x - 25 = 0$$

$$(11) x^2 + 10x + 2 = 0$$

$$(12) x^2 - 2x - 10 = 0$$

$$(13) \ 2x^2 - 36x + 156 = 0$$

$$(14) 4x^2 - 32x - 4 = 0$$

$$(15) \ 3x^2 + 48x + 177 = 0$$

$$(16) \ 3x^2 - 42x + 102 = 0$$

$$(17)\ 5x^2 + 50x + 70 = 0$$

$$(18) \ 4x^2 - 48x + 104 = 0$$

$$(19) \ (x - \frac{1}{2})^2 = \frac{57}{4}$$

$$(20) \ (x - \frac{7}{2})^2 = \frac{57}{4}$$

$$(21) \ (x + \frac{5}{2})^2 = \frac{73}{4}$$

$$(22) \left(x + \frac{3}{2}\right)^2 = \frac{133}{4}$$

- (1) $x = -5 \pm 1\sqrt{34}$
- (2) $x = 10 \pm 2\sqrt{21}$
- (3) $x = 9 \pm -\sqrt{22}$
- (4) $x = -6 \pm -3\sqrt{3}$
- (5) $x = -9 \pm 4\sqrt{2}$
- (6) $x = -9 \pm -2\sqrt{2}$
- $(7) \ x = 8 \pm \sqrt{3}$
- (8) $x = 4 \pm \sqrt{43}$
- (9) $x = 4 \pm \sqrt{11}$
- (10) $x = -4 \pm \sqrt{41}$
- (11) $x = -5 \pm \sqrt{23}$
- (12) $x = 1 \pm \sqrt{11}$
- (13) $x = +9 \pm \sqrt{3}$
- (14) $x = +4 \pm \sqrt{17}$
- (15) $x = -8 \pm \sqrt{5}$
- (16) $x = +7 \pm \sqrt{15}$
- $(17) \ x = -5 \pm \sqrt{11}$

- $(17) x = -3 \pm \sqrt{11}$ $(18) x = +6 \pm \sqrt{10}$ $(19) x = \frac{1 \pm \sqrt{57}}{2}$ $(20) x = \frac{7 \pm \sqrt{57}}{2}$ $(21) x = \frac{-5 \pm \sqrt{73}}{2}$ $(22) x = \frac{-3 \pm \sqrt{133}}{2}$