A6 Review

Be sure to show all your thinking!

1. Mulitply
$$2(x-3)(4x+1)$$

2. Multiply
$$(x-4)(x+6)$$

3. Factor
$$x^2 + 8x + 12$$

4. Factor
$$x^2 - 5x - 36$$

5. Factor
$$3x^2 - 27x + 24$$

6. Solve
$$x^2 - 2 = 62$$

7. Solve
$$(x-5)^2 + 4 = 85$$

8. Solve
$$x^2 - 2x = 63$$

9. Solve
$$x^2 - 3x - 10 = 0$$

10. Solve
$$-2x^2 - 3x + 9 = 0$$

13. Convert to factored form.
$$y = (x-2)^2 - 16$$

14. Convert to standard form.
$$y = -2(x-2)^2 - 3$$

15. Convert to vertex form.
$$y = (x-4)(x+2)$$