

Name: \_\_\_\_\_

**Unit 7:** Polynomials & Factoring

Date: \_\_\_\_\_ Bell: \_\_\_\_\_

**Homework 3:** Multiplying Binomials & Trinomials**Directions:** Simplify the following polynomials. **Answers must be in standard form.**

1.  $(x + 2)(x + 7)$

2.  $(x + 8)(x + 3)$

3.  $(b + 4)(b - 2)$

4.  $(w - 7)(w + 3)$

5.  $(m - 5)(m - 2)$

6.  $(y - 1)(y - 3)$

7.  $(2x + 3)(x + 1)$

8.  $(k + 4)(3k + 2)$

9.  $(4m + n)(m - 2n)$

10.  $(w + 6)(3w - 4)$

11.  $(5x + 3)(x - 2)$

12.  $(2a - 4b)(7a - 2b)$

13.  $(x + 4)^2$

14.  $(a - 3)^2$

15.  $(4m + 1)^2$

16.  $(x + 1)(x - 1)$

17.  $(y - 8)(y + 8)$

18.  $(2w + 1)(2w - 1)$

19.  $(3a + 4b)(3a - 4b)$

20.  $(x + 5)(x^2 + 4x - 8)$

21.  $(m + 3)(m^2 + 4m + 7)$

22.  $(4x - 1)(x^2 - 7x + 1)$

23.  $(2h + 3)(2h^2 + 3h + 4)$

24.  $(3x + 2)(5x^2 - 12x - 2)$

25. Write an expression to represent the area of the shaded region in simplest form.

