

Assignment 4

Here is a mixture of multiplying powers to powers and distributing problems. These are similar to what you may see on the next test.

1. $-5ab^2(a^2 - 2ab + 3b^2)$

2. $(2xy^2)^3(yz^2)(-xz)$

3. $-xy(3xy - x^2y + x^3)$

4. $2a^2b(-ab^3 + 3a^2b^2 - 1)$

5. $(-ab^2)^2(-a^2b)^3(2a^3b^2)$

6. $(2x^3y^4)^3$

7. $(-2xz)(3xy^2)^2(-y^3z)$

Practice with FOIL. Try to eliminate the second step by combining the O and I in your head.

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

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

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

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

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

6. $(3x-5)(3x+2)$

Name: _____

Add and subtract the polynomials

1. $(x^2 + 3x - 5) + (2x^2 + x + 6)$

2. $(2xy^2 - 5xy + 3x) + (4xy^2 - 3xy - 5x)$

3. $(x^3 + 2x^2 - x + 5) + (3x^3 + 4x - 3)$

4. $(5x^2 + 6x + 7) - (x^2 + 4x + 2)$

5. $(3x^3 - 2x^2 + x - 4) - (5x^2 - x + 3)$

6. $(2x^2y + 5xy - y) + (x^2y^2 + 3x^2y - 4y)$

Practice Test*Simplify each expression.*

1. $(3x+1)(5x-1)$

2. $2x^2y(5x+2-y)$

3. $(2xy)(5xy^2)(-y^3)$

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

5. $(3x-4)(3x+4)$

9. $(2x^4y^2)^3$

7. $(-3xy)^2(2x^4y^3)$

8. $-x^2y^3(5x^3y+2x^2y^2-xy^3)$

9. $(3x^2y)(5xy^2)^2(-x^3y^2)$

10. $(5xy^3z^4)^2$

11. $(2x^4y^2)(-xy^3)(-3x^2)$

12. $5x^3-2x^2+x-3x^3+7x^2-3x+7$

13. $-2y^3(y+2x^2-xy^3)$

14. $(-x^3y^2)^2(-xy^2)^3(-x^3y^2)$

15. $(3x+5)(x-6)$