

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

## Math 1 – Multiplying Polynomials

**Simplify**

1)  $x(x + 3)$

2)  $4x(2x^2 + 3)$

3)  $-3c^2d^2(6cd^2 - 3)$

4)  $2y(2y^2 - 6y + 1)$

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

6)  $4xy(3x - 2)$

7)  $3a^2b(3ab^2 + 2ab - 1)$

8)  $(2x + 4)(2x + 1)$

9)  $(x - 2)(x + 3)$

10)  $(3x + 5)(4x - 4)$

11)  $(a - 8)^2$

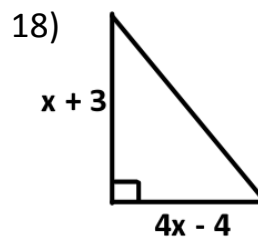
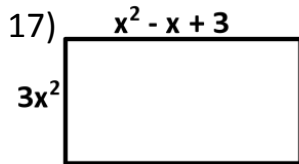
12)  $(3y + 2)^2$

13)  $(x + 3)(2x^2 + 4x + 5)$

14)  $(x + 7)^2$

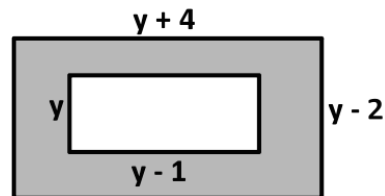
15)  $(x + 2)(x - 2)$

16)  $(6x + 1)(6x - 1)$

**Find the area of the given figures.**

19) The side of a square is 2 more than 3 times a number  $x$ .

20) Find the area of the shaded region.

**Divide**

21) 
$$\frac{4x^2 - 4x + 12}{-4}$$

22) 
$$\frac{6x^3 + 12x^2 - 36x}{3x}$$

23) 
$$\frac{40x^5 + 20x^4 + 10x^3}{10x^3}$$