

Warm-up:

Find each product.

$$(2x + 5)(3x - 2)$$
$$6x^2 - 4x + 15x - 10$$
$$6x^2 + 11x - 10$$

$$(x - 9)(4x - 5)$$
$$4x^2 - 5x - 36x + 45$$
$$4x^2 - 41x + 45$$

Algebra 1

Unit 4, Day 9

Special Products

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Special Products

Find each product.

$$x^2 + 12x + 36$$

$$(x + 6)^2$$

$$(x + 6)(x + 6)$$

$$x^2 + 6x + 6x + 36$$

$$x^2 + 12x + 36$$

$$(2b + 5c)^2$$

$$4b^2 + 20bc + 25c^2$$

$$9m^2 - 12m + 4$$

$$(3m - 2)^2$$

$$(3m - 2)(3m - 2)$$

$$9m^2 - 6m - 6m + 4$$

$$9m^2 - 12m + 4$$

Classwork

Complete page 20 in the packet. We will go over the answers at the end of class.



Find each product.

1) $(x-6)^2$

$$(x-6)(x-6)$$

$$x^2 - 12x + 36$$

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

$$(3p+4)(3p+4)$$

$$9p^2 + 24p + 16$$

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

$$(4x-5)(4x-5)$$

$$16x^2 - 40x + 25$$

4) $(2x-1)^2$

$$(2x-1)(2x-1)$$

$$4x^2 - 4x + 1$$

5) $(2h+3)^2$

$$(2h+3)(2h+3)$$

$$4h^2 + 12h + 9$$

6) $(m+5)^2$

$$(m+5)(m+5)$$

$$m^2 + 10m + 25$$

7) $(c+3)^2$

$$(c+3)(c+3)$$

$$c^2 + 6c + 9$$

8) $(3-p)^2$

$$(3-p)(3-p)$$

$$9 - 6p + p^2$$

9) $(x-5)^2$

$$(x-5)(x-5)$$

$$x^2 - 10xy + 25y^2$$

10) $(8y+4)^2$

$$(8y+4)(8y+4)$$

$$64y^2 + 64y + 16$$

11) $(8+x)^2$

$$(8+x)(8+x)$$

$$64 + 16x + x^2$$

12) $(3a-2b)^2$

$$(3a-2b)(3a-2b)$$

$$9a^2 - 12ab + 4b^2$$

13) $(2x-8)^2$

$$(2x-8)(2x-8)$$

$$4x^2 - 32x + 64$$

14) $(x^2+1)^2$

$$(x^2+1)(x^2+1)$$

$$x^4 + 2x^2 + 1$$

15) $(m^2-2)^2$

$$(m^2-2)(m^2-2)$$

$$m^4 - 4m^2 + 4$$

Algebra 1

Unit 4, Day 9 Special Products

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