

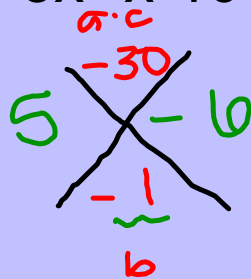
Monday - January 23rd

1) Factor  $3x^2 - x - 10$

$a = 3$

$b = -1$

$c = -10$



$1 \cdot -30$

$-1 \cdot 30$

$2 \cdot -15$

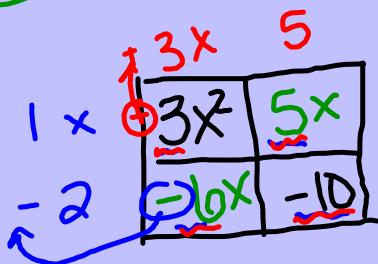
$-2 \cdot 15$

$3 \cdot -10$

$-3 \cdot 10$

$5 \cdot -6$

$-5 \cdot 6$



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

2) Simplify:

$$(3 - 6n^5 - 8n^4) - (-6n^4 + 3n + 8n^5)$$

$$(3 - 6n^5 - 8n^4) + (6n^4 - 3n - 8n^5)$$

$$+ 3 - 14n^5 - 2n^4 - 3n$$

$-14n^5 - 2n^4 - 3n + 3$

### Homework Answers

#### U7 Day 9 - Review of Days 1-3

① C

③ A

⑤ D

⑦ C

⑩ C

\* ⑭ A

⑮ C

Algebra I

Name \_\_\_\_\_ ID: 1

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## U7 Day 9 - Review of Days 1-3

Date \_\_\_\_\_ Period \_\_\_\_\_

**Name each polynomial by degree and number of terms.**

1)  $-3x^2 + 3x - 3$

- A) linear trinomial
- B) cubic binomial
- C) quadratic trinomial
- D) quadratic monomial

2)  $8p^5 - 10p^3 - 2p$

- A) quintic trinomial
- B) linear monomial
- C) cubic polynomial with five terms
- D) quintic monomial

3)  $6m$

- A) linear monomial
- B) quintic monomial
- C) quintic trinomial
- D) linear binomial

4)  $-x^2 + 4$

- A) quadratic binomial
- B) quartic binomial
- C) quadratic trinomial
- D) quintic binomial

5)  $-4 - 6m^4 + 7m^3$

- A) linear monomial
- B) quadratic monomial
- C) quartic monomial
- D) quartic trinomial

6)  $-m^3$

- A) constant monomial
- B) linear monomial
- C) cubic monomial
- D) linear trinomial

**Simplify each sum.**

7)  $(7a + 3a^3 + 8) + (8 - 4a - a^2)$

- A)  $6a^3 - a^2 + 3a + 13$
- B)  $6a^3 - a^2 + 3a + 12$
- C)  $3a^3 - a^2 + 3a + 16$
- D)  $6a^3 - a^2 + 3a + 16$

8)  $(3 - n^2 + 4n^4) + (8n^2 - 3 + 4n^4)$

- A)  $8n^4 + 7n^2$
- B)  $8n^4 + 7n^2 + 4$
- C)  $8n^4 + 7n^2 - 1$
- D)  $8n^4 + 7n^2 - 4$

9)  $(4 - 3n^2 + 6n^4) + (3n^2 - 2 - 6n^4)$

- A)  $2 - 3n^2$
- B)  $2 - 5n^2$
- C)  $2$
- D)  $2 - 5n^2 - 3n^4$

Simplify each difference

10)  $(8b^3 - 6 - 5b^4) - (2b^4 + 3b^3 - 5b)$

- A)  $-7b^4 + 5b^3 + b - 11$
- B)  $-7b^4 + 5b^3 + b - 14$
- C)  $-7b^4 + 5b^3 + 5b - 6$
- D)  $-7b^4 + 5b^3 + b - 6$

$(8b^3 - 6 - 5b^4) + (-2b^4 - 3b^3 + 5b)$   
 $5b^3 - 6 - 7b^4 + 5b$   
 $-7b^4 + 5b^3 + 5b - 6$

11)  $(8 - 6m^4 - m) - (2m - 8m^4 - 8)$

- A)  $2m^4 - 10m + 16$
- B)  $m^4 - 10m + 12$
- C)  $m^4 - 10m + 16$
- D)  $2m^4 - 3m + 16$

12)  $(4m^2 + 2m^4 + 2) - (3m + 6m^4 - 4)$

- A)  $-4m^4 + 4m^2 - 3m + 6$
- B)  $-4m^4 - m^2 - 3m + 6$
- C)  $-4m^4 - m^2 + 3m + 6$
- D)  $-2m^4 - m^2 + 3m + 6$

Find each product.

13)  $(6r - 2)(6r - 3)$

- A)  $36r^2 + 6$
- B)  $36r^2 - 30r + 6$
- C)  $36r^2 - 6r - 6$
- D)  $36r^2 + 6r - 6$

14)  $(7x + 3)(3x + 8)$

- A)  $21x^2 + 65x + 24$
- B)  $21x^2 + 24$
- C)  $35x^2 - 64x + 21$
- D)  $35x^2 - 34x - 21$

① distribute  
 ② box

$21x^2 + 56x + 9x + 24$

$21x^2 + 65x + 24$

15)  $(3r + 8)(7r - 2)$

- A)  $14r^2 - 57r + 28$
- B)  $21r^2 - 62r + 16$
- C)  $21r^2 + 50r - 16$
- D)  $14r^2 + 28$

16)  $(7v - 4)(2v - 1)$

- A)  $8v^2 - 6$
- B)  $8v^2 - 2v - 6$
- C)  $14v^2 - 15v + 4$
- D)  $14v^2 + v - 4$

17)  $(6r - 6)(5r + 5)$

A)  $30r^2 - 30$

B)  $-35r^2 + 48r - 16$

C)  $30r^2 + 60r + 30$

D)  $-35r^2 - 8r + 16$

18)  $(-3a + 6)(6a + 5)$

A)  $-18a^2 - 51a - 30$

B)  $-18a^2 + 30$

C)  $-18a^2 + 21a + 30$

D)  $-18a^2 + 51a - 30$

19)  $(2n + 2)^2$

A)  $4n^2 + 4$

B)  $n^2 - 25$

C)  $4n^2 - 4$

D)  $4n^2 + 8n + 4$

20)  $(7v + 4)(7v - 4)$

A)  $49v^2 + 56v + 16$

B)  $49v^2 - 56v + 16$

C)  $36v^2 - 84v + 49$

D)  $49v^2 - 16$

- ① "notes" (examples)
- ② review
- ③ Kahoot!
- ④ keep reviewing/assign homework

Algebra 1

Name \_\_\_\_\_ ID: 1

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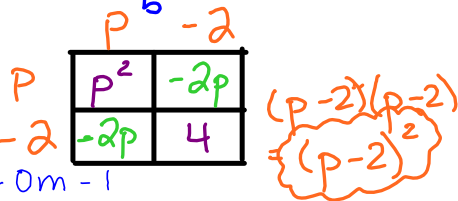
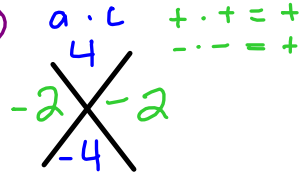
U7 Day 10 - Factoring Special Cases

Date \_\_\_\_\_ Period \_\_\_\_\_

Factor each completely.

1)  $p^2 - 4p + 4$

$a = 1$   
 $b = -4$   
 $c = 4$

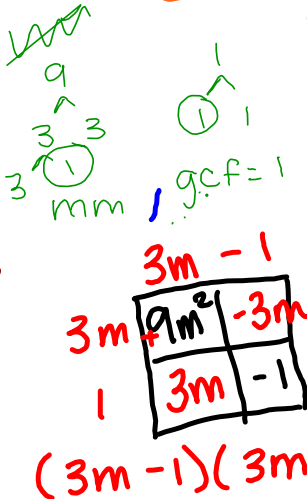
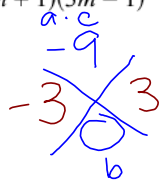


$am^2 + 0m - 1$

3)  $9m^2 - 1$

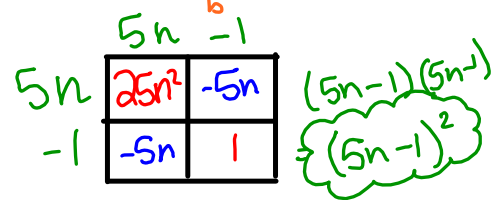
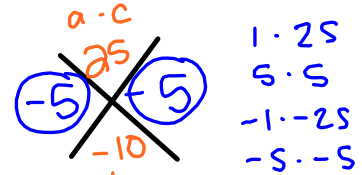
- A)  $(3m - 1)^2$
- B)  $(m + 2)(m - 2)$
- C)  $(3m + 1)(3m - 1)$
- D)  $(-3m + 1)(3m - 1)$

$a = 9$   
 $b = 0$   
 $c = -1$   
 $1 \cdot -9$   
 $-1 \cdot 9$   
 $-3 \cdot 3$



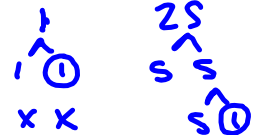
2)  $25n^2 - 10n + 1$

$a = 25$   
 $b = -10$   
 $c = 1$



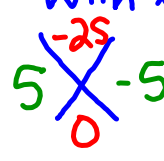
4)  $x^2 - 25$

- A)  $(x - 5)^2$
- B)  $(3x + 2)(3x - 2)$
- C)  $(x + 25)^2$
- D)  $(x + 5)(x - 5)$



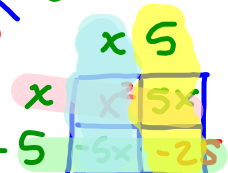
gcf = 1 → factor with x + box

$a = 1$   
 $b = 0$   
 $c = -25$



$(3m - 1)(3m + 1)$

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



5)  $16r^2 - 8r + 1$

- A)  $(5r + 4)^2$
- B)  $(4r + 1)(4r - 1)$
- C)  $(4r + 1)^2$
- D)  $(4r - 1)^2$

6)  $9x^2 - 16$

- A)  $(x + 1)(x - 1)$
- B)  $(3x + 4)(3x - 4)$
- C)  $(3x + 8)^2$
- D)  $(3x + 1)^2$