

1

Unit 5, Day 2, Day Of HW) Use Generic Rectangles to find the product/factors:

Directions: Find the missing dimensions (length x width) for each generic rectangle/box. Write each answer as the PRODUCT = SUM. Then find the roots!

①

$12x$	$15$
$8x^2$	$10x$

②

$2x^2$	$10x$
$-3x$	$-15$

③

$4x^2$	$12x$
$-x$	$-3$

④

$2x^2$	$-2x$
$-3x$	$3$

⑤

$-3x$	$3$
$6x^2$	$-6x$

⑥

$x^2$	$3x$
$2x$	$6$

Challenge: find missing parts, write answer so product = sum.

⑦

$x^2$	
$12x$	

+ 5

⑧

$x$	$x^2$
	$6$

①

Day 3, Day Of Homework: Factoring with Generic Rectangle/Box and Diamond

Directions: Choose 6 to complete

Factoring Trinomials ( $a > 1$ ) Then find roots! Date \_\_\_\_\_ Period \_\_\_\_\_

Factor each completely. Use a generic rectangle and diamond problem for each!  
(write as a product!)

1)  $3p^2 - 2p - 5$

2)  $2n^2 + 3n - 9$

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

4)  $5n^2 + 19n + 12$

5)  $2v^2 + 11v + 5$

6)  $2n^2 + 5n + 2$

7)  $7a^2 + 53a + 28$

8)  $9k^2 + 66k + 21$

2

Kuta Software - Infinite Algebra 1

Name Copy into Notebook

Factoring Trinomials (a = 1)

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

Factor each completely. Then find roots!

1)  $b^2 + 8b + 7$

2)  $n^2 - 11n + 10$

3)  $m^2 + m - 90$

4)  $n^2 + 4n - 12$

5)  $n^2 - 10n + 9$

6)  $b^2 + 16b + 64$

7)  $m^2 + 2m - 24$

8)  $x^2 - 4x + 24$

9)  $k^2 - 13k + 40$

10)  $a^2 + 11a + 18$

11)  $n^2 - n - 56$

12)  $n^2 - 5n + 6$

2

13)  $b^2 - 6b + 8$

14)  $n^2 + 6n + 8$

15)  $2n^2 + 6n - 108$

16)  $5n^2 + 10n + 20$

17)  $2k^2 + 22k + 60$

18)  $a^2 - a - 90$

19)  $p^2 + 11p + 10$

20)  $5v^2 - 30v + 40$

21)  $2p^2 + 2p - 4$

22)  $4v^2 - 4v - 8$

23)  $x^2 - 15x + 50$

24)  $v^2 - 7v + 10$

25)  $p^2 + 3p - 18$

26)  $6v^2 + 66v + 60$

Name Copy into Notebook  
Date \_\_\_\_\_ Period \_\_\_\_\_

3

Kuta Software - Infinite Algebra 1

Factoring Trinomials ( $a > 1$ )

Factor each completely. Find the roots!

1)  $3p^2 - 2p - 5$

2)  $2n^2 + 3n - 9$

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

4)  $5n^2 + 19n + 12$

5)  $2v^2 + 11v + 5$

6)  $2n^2 + 5n + 2$

7)  $7a^2 + 53a + 28$

8)  $9k^2 + 66k + 21$

3

9)  $15n^2 - 27n - 6$

10)  $5x^2 - 18x + 9$

11)  $4n^2 - 15n - 25$

12)  $4x^2 - 35x + 49$

13)  $4n^2 - 17n + 4$

14)  $6x^2 + 7x - 49$

15)  $6x^2 + 37x + 6$

16)  $-6a^2 - 25a - 25$

17)  $6n^2 + 5n - 6$

18)  $16b^2 + 60b - 100$

Copy into notebook

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

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

Block: \_\_\_\_\_

**Worksheet Factoring Trinomials**

Try to fast factor!

Factor the following completely. Look for a GCF first. Then find roots!

Check w/  
foil!

1.  $x^2 + 13x - 30$

2.  $x^2 - 5x - 24$

3.  $x^2 + 5x - 36$

4.  $x^2 + 15x + 56$

5.  $x^2 + 15x + 54$

6.  $x^2 - 8x - 20$

7.  $x^2 + 4x - 32$

8.  $x^2 - x - 20$

9.  $x^2 + 11x + 30$

10.  $x^2 + 14x + 49$

11.  $x^2 + 10x + 16$

12.  $x^2 + 3x + 2$

13.  $x^2 + 15x + 44$

15.  $x^2 + 6x + 5$

16.  $2x^2 + 20x + 32$

18.  $3x^2 - 15x + 18$

19.  $2x^2 + 8x - 24$

20.  $2x^2 + 16x - 32$

4

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Block: \_\_\_\_\_

21.  $3x^2 + 7x + 2$

22.  $2x^2 + 5x + 3$

23.  $3x^2 - 16x + 5$

24.  $7x^2 - 9x + 2$

25.  $6x^2 + 5x + 1$

26.  $8x^2 - 9x + 1$

27.  $10x^2 + 17x + 3$

28.  $9x^2 - 9x + 2$

29.  $5x^2 + 11x + 6$

30.  $3x^2 + 2x - 1$

31.  $5x^2 - 4x - 1$

32.  $2x^2 + 5x - 3$

33.  $7x^2 - 13x - 2$

34.  $3x^2 + 14x - 5$

35.  $4x^2 - 11x + 7$