

The Unit 2 Summative is Tuesday!!

Return and Correct SWYK 2.2

Correct Unit 1 Summative

Correct from last day: pp. 115-116 # 3, 4abde, 11

READ pp. 118-119

pp. 120-121 # 9, 13, 16, 18

Factoring Worksheet #1-30 (answers now posted in Google Classroom)

Mon. Mar. 2	2.4 Factoring Quadratic Expressions: $ax^2+bx+c, a \neq 1$ (Day 1)	p. 110 # 4, 5, 7bc, 9, 10, 13bd
Tues. Mar. 3	2.4 Factoring Quadratic Expressions: $ax^2+bx+c, a \neq 1$ (Day 2)	Worksheet: Factoring Practice #1-30
Wed. Mar. 4	SWYK 2.2 (on Factoring) 2.5 Factoring Special Cases	pp. 115-116 # 3, 4abde, 11 READ pp. 118-119 pp. 120-121 # 9, 13, 16, 18
Thurs. Mar. 5	Review	pp. 120-121 # 1ac, 3bd, 4, 5, 19
Fri. Mar. 6	Correct Review Begin 3.2 Standard & Factored Forms	pp. 139-142 # 2bd, 3cd, 4bde, 5be, 6, 7cde, 12bcd, 14 READ pp. 153-154
Mon. Mar. 9	3.3 Solving Quadratic Equations by Graphing (Part 1)	Study for tomorrow's Summative READ p. 154 pp. 149-151 # 1b, 4ace, 11, 13 p. 155 #1, 2, 3ad, 5a, 6a, 7
Tues. Mar. 10 [Interim Reports]	UNIT 2 SUMMATIVE	

MCF 3MI

Factoring Practice

Copy each question in your workbook. Then, factor the following, completely.

- | | | |
|----------------------------------|----------------------------|-----------------------------|
| 1. $7x^2y - 28x^3y^2 + 21x^2y^3$ | 2. $x^2 - 7x + 12$ | 3. $x^2 - 23x + 76$ |
| 4. $m(2x - 1) - 5(1 - 2x)$ | 5. $2x^2 + 17x + 35$ | 6. $x^2 + 4x - 12$ |
| 7. $x^2 - 9x + 14$ | 8. $5y^2 + 27y - 18$ | 9. $4x^3 + 16x^2 - 84x$ |
| 10. $x^2 + 19x + 18$ | 11. $5x^2 + 4x - 1$ | 12. $8m^3 - 2m^2n - 21mn^2$ |
| 13. $x^2 + 5x - 14$ | 14. $4y^2 + 12yz + 9z^2$ | 15. $10x^4 + 21x^2 + 8$ |
| 16. $12x^2 + 26x - 10$ | 17. $x^2 + 4xy - 32y^2$ | 18. $5x^2 + 18x - 8$ |
| 19. $10x^2 + x - 21$ | 20. $x^2 + 4xy - 21y^2$ | 21. $4x^2 - 15x + 9$ |
| 22. $8x^2 - 14x - 15$ | 23. $8x^2 - 22xy - 21y^2$ | 24. $9x^2 - 18x - 135$ |
| 25. $4x^2 - 16x + 15$ | 26. $5x^2 - 19x + 12$ | 27. $3x^2 + 16x - 12$ |
| 28. $14y^2 + 77y - 147$ | 29. $16x^2 - 72xy + 81y^2$ | 30. $6a^4 - 21a^2 - 45$ |

p. 115

4. Factor, if possible.

$$\begin{aligned} \text{d) } 20a^2 - 180 \\ &= 20(a^2 - 9) \\ &= 20(a+3)(a-3) \end{aligned}$$

$$\begin{aligned} \text{11c) } (2x - y)^2 - 9 \\ \text{let } w = 2x - y \\ &w^2 - 9 \\ &= (w - 3)(w + 3) \\ &= ((2x - y) - 3)((2x - y) + 3) \\ &= (2x - y - 3)(2x - y + 3) \end{aligned}$$

p. 121

16. Factor.

$$\begin{aligned} \text{a) } 4x^2 - 9 \\ \text{b) } 16a^2 - 24a + 9 \\ \text{c) } x^8 - 256 \\ \text{d) } (x - 2)^2 + 6(x - 2) + 9 \end{aligned}$$

$$\begin{aligned} \text{let } w = x - 2 \\ &w^2 + 6w + 9 \\ &= (w + 3)^2 \\ &= (x - 2 + 3)^2 \\ &= (x + 1)^2 \end{aligned}$$

$$\begin{aligned} \text{18f) } 15c^3 + 25c^2 \\ &= 5c^2(3c + 5) \end{aligned}$$

Let's Practice Jeopardy
vs.
Knowledge Hook

If asked, set up a student account.
If you forgot your password, I can simply reset it.

Students log in or register by going to:

1 joinkh.com

2
ray3399

3 Create or select their
account

Practice: Factoring Worksheet #1-30 (posted in Google Classroom)

MCF 3MI

Factoring Practice

Copy each question in your workbook. Then, factor the following, completely.

1. $7x^2y - 28x^3y^2 + 21x^2y^3$

4. $m(2x-1) - 5(1-2x)$

7. $x^2 - 9x + 14$

10. $x^2 + 19x + 18$

13. $x^2 + 5x - 14$

16. $12x^2 + 26x - 10$

19. $10x^2 + x - 21$

22. $8x^2 - 14x - 15$

25. $4x^2 - 16x + 15$

28. $14y^2 + 77y - 147$

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

5. $2x^2 + 17x + 35$

8. $5y^2 + 27y - 18$

11. $5x^2 + 4x - 1$

14. $4y^2 + 12yz + 9z^2$

17. $x^2 + 4xy - 32y^2$

20. $x^2 + 4xy - 21y^2$

23. $8x^2 - 22xy - 21y^2$

26. $5x^2 - 19x + 12$

29. $16x^2 - 72xy + 81y^2$

3. $x^2 - 23x + 76$

6. $x^2 + 4x - 12$

9. $4x^3 + 16x^2 - 84x$

12. $8m^3 - 2m^2n - 21mn^2$

15. $10x^4 + 21x^2 + 8$

18. $5x^2 + 18x - 8$

21. $4x^2 - 15x + 9$

24. $9x^2 - 18x - 135$

27. $3x^2 + 16x - 12$

30. $6a^4 - 21a^2 - 45$

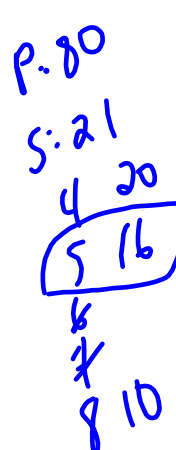
12) $8m^3 - 2m^2n - 21mn^2$
 $= m(8m^2 - 2mn - 21n^2)$
 $= m(8m^2 + 12mn - 14mn - 21n^2)$
 $= m(4m(2m+3n) - 7n(2m+3n))$
 $= m(2m+3n)(4m-7n)$ p. -168 s: -2

15) $10x^4 + 21x^2 + 8$
 $= 10x^4 + 5x^2 + 16x^2 + 8$
 $= 5x^2(2x^2+1) + 8(2x^2+1)$
 $= (2x^2+1)(5x^2+8)$

$10x^2 + 21x + 8$
 $= (x^7)(x^7)$
 $10x^{14} + 21x^7 + 8$
 $= (x^7)(x^7)$

26) p: 60 s: -19 12-14
 $5x^2 - 19x + 12$
 $= 5x^2 - 4x - 15x + 12$
 $= x(5x-4) - 3(5x-4)$
 $= (5x-4)(x-3)$
 1 - 60
 -2 - 30
 -3 - 20
 -4 - 15
 -6 - 10

29) $16x^2 - 72xy + 81y^2$
 $= (4x - 9y)^2$



p.120 1c)

$$2(x^2 - 5) - 7x(8x - 9)$$

$$= \underline{2x^2} - \underline{10} - \underline{56x^2} + \underline{63x}$$

$$= -54x^2 + 63x - 10$$

p.32 11bi)

$$f(x) = x^2 - 6x + 9$$

$$= ()^2 - 6() + 9$$

$$f(0) = 0^2 - 6(0) + 9$$

$$= 9$$

$$f(1) = 4$$

$$f(2) = 1$$

$$f(3) = 0$$

x	y
0	9
1	4
2	1
3	0

$$v) [f(2) - f(1)] - [f(1) - f(0)]$$

$$= [(1) - 4] - [4 - 9]$$

$$= (-3) - (-5)$$

$$= -3 + 5$$

$$= 2$$

p.1296

$$p.110 9d) 12n^3 - 75n^2 + 108n$$

$$= 3n(4n^2 - 25n + 36)$$

$$= 3n(4n^2 - 16n - 9n + 36)$$

$$= 3n(4n(n-4) - 9(n-4))$$

$$= 3n(n-4)(4n-9)$$

Answers to Factoring Practice:

- | | | |
|------------------------|-------------------------|------------------------|
| 1. $7x^2y(1-4xy+3y^2)$ | 2. $(x-4)(x-3)$ | 3. $(x-19)(x-4)$ |
| 4. $(2x-1)(m+5)$ | 5. $(2x+7)(x+5)$ | 6. $(x+6)(x-2)$ |
| 7. $(x-7)(x-2)$ | 8. $(5y-3)(y+6)$ | 9. $4x(x+7)(x-3)$ |
| 10. $(x+18)(x+1)$ | 11. $(5x-1)(x+1)$ | 12. $m(2m+3n)(4m-7n)$ |
| 13. $(x+7)(x-2)$ | 14. $(2y+3z)(2y+3z)$ ** | 15. $(5x^2+8)(2x^2+1)$ |
| 16. $2(3x-1)(2x+5)$ | 17. $(x+8y)(x-4y)$ | 18. $(5x-2)(x+4)$ |
| 19. $(5x-7)(2x+3)$ | 20. $(x+7y)(x-3y)$ | 21. $(4x-3)(x-3)$ |
| 22. $(4x+3)(2x-5)$ | 23. $(4x+3y)(2x-7y)$ | 24. $9(x-5)(x+3)$ |
| 25. $(2x-3)(2x-5)$ | 26. $(5x-4)(x-3)$ | 27. $(3x-2)(x+6)$ |
| 28. $7(2y-3)(y+7)$ | 29. $(4x-9y)(4x-9y)$ ** | 30. $3(2a^2+3)(a^2-5)$ |