

Factor...

Warm Up simple A=1

① $-24x^4y^3 + 48x^3y - 72x^2y^2$
 $-24x^2y(x^2y^2 - 2x + 3y)$

② $x^2 - 11x - 26$ M-26
 $(x-13)(x+2)$ A-11
 N-13
 +2

③ $6n^2 - 10n - 4$ M-6
 $2(3n^2 - 5n - 2)$ A-5
 N-6+1

④ $400 - 100y^2$
 $100(4 - y^2)$
 $100(2-y)(2+y)$


$2(3n^2 - 6n + n - 2)$
 $2[3n(n-2) + 1(n-2)]$
 $2(n-2)(3n+1)$

⑤ $28v^3 + 16v^2 - 21v - 12$
 $4v^2(7v+4) - 3(7v+4)$
 $(7v+4)(4v^2-3)$

Problems with the homework?

$8x^3 + 12x = 4x(2x^2 + 3)$

Homework

 Factor & Products worksheet
Section 3.8

UNIT 2 – FACTORS AND PRODUCTS
Worksheet – Section 3.8
K. Sears

NAME: _____

DATE: _____

Factor fully, if possible.

1. $x^2 - 11x - 26$

11. $f^2 - 20f + 64$

2. $-24x^4y^3 + 48x^3y - 72x^2y^2$

12. $18c^2 + 30c - 42$

3. $5p^2 - 3p + 1$

13. $9y^2 + 12y + 4$

4. $a^2 - 14a + 49$

14. $400 - 100y^2$

5. $x^2 - 169$

15. $64x^2 - 16xy + y^2$

6. $2n^2 - 9n + 4$

16. $16m^2 - 24mn + 9n^2$

7. $48f^2 + 24f + 3$

17. $x^4 - 625y^4$

8. $25m^2 + 90m + 81$

18. $3a^4 - 243b^4$

9. $144a^2 - 400b^2$

19. $6x^2 - 13x + 3$

10. $6n^2 - 10n - 4$

20. $512c^4 - 162d^4$

ANSWERS:

1. $(x - 13)(x + 2)$
2. $-24x^2y(x^2y^2 - 2x + 3y)$
3. Not factorable
4. $(a - 7)^2$
5. $(x - 13)(x + 13)$
6. $(2n - 1)(n - 4)$
7. $3(4f + 1)^2$
8. $(5m + 9)^2$
9. $16(3a - 5b)(3a + 5b)$
10. $2(n - 2)(3n + 1)$
11. $(f - 4)(f - 16)$
12. $6(3c^2 + 5c - 7)$
13. $(3y + 2)^2$
14. $100(2 - y)(2 + y)$
15. $(8x - y)^2$
16. $(4m - 3n)^2$
17. $(x^2 + 25y^2)(x - 5y)(x + 5y)$
18. $3(a^2 + 9b^2)(a - 3b)(a + 3b)$
19. Not factorable
20. $2(16c^2 + 9d^2)(4c - 3d)(4c + 3d)$

Attachments

Worksheet Section 3.8.pdf