

Unit 2 : Factoring Polynomials

Worksheet 2.1

Drag and drop the correct factors in each item. Choose the answer inside the box.

1. $x^3 - 6x^8 + 10x^{10}$

2. $25u^6 - 15u^5 + 30u^8$

3. $2y^6z - y^4z^{10} + 3y^2z^2$

4. $7a^{10}b^7 + 14a^8b^9 - 35a^6b^{12}$

5. $3(9 + 7x) - (2 - x)(9 + 7x)$

6. $z^2(4z - z^3) + 7(z^3 - 4z)$

7. $8y(2y + 7)^4 - 2y^3(2y + 7)^9$

8. $w^2(1 + w^2)(8w - 1)^{10} + 9w(1 + w^2)^4(8w - 1)^7$

Possible Answers

1. $x^3(1 + 6x^5 - 10x^7)$

$x^3(1 - 6x^5 + 10x^7)$

2. $5u^5(5u - 3 + 6u^3)$

$5u^5(5 - 3 + 6u^3)$

3. $y^2z(2y^4 - y^2z^9 + 3z)$

$y^2z(2y^4 - y^2z^9 + 3)$

4. $7a^6b^7(a^4 + 2a^2b^2 - 5b^5)$

$7a^6b^7(a^4 + 2a^2b^2 - 5ab^5)$

5. $(9 + 7x)(3 - 2x)$

$(9 + 7x)(1 + x)$

6. $(z^2 + 7)(4z - z^3)$

$(z^2 - 7)(4z - z^3)$

7. $(2y)(2y + 7)^4(4 - y^2(2y + 7)^5)$

$(2y + 7)^4(4 - y^2(2y + 7)^5)$

8. $[w(1 + w^2)(8w - 1)^7][w(8w - 1)^3 + 9(1 + w^2)^3]$

$[w(1 + w^2)(8w - 1)^7][(8w - 1)^3 + 9(1 + w^2)^3]$

Name : _____ No. _____

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