Practice Exercises on Factoring Polynomials with Common Monomial Factor

A. Factoring Integers

Completely factor the following numbers. One point each.

1. 28

4. 45

2. 36

3. 60

5. 54

B. Finding the Common Factor

Find the greatest common monomial factor of each polynomial. One point each.

1. $6x^2 + 3xy$

2. 24abx + 20ab

3. $15x^2y - 6xy$

4. 36ab + 60b

5. $18a^3 - 24a^2$

 $6. \ 12x^2y + 12xy^2 + 24xyz$

7. $3x^4 - 6x^3y$

8. $9x^2 + 9xy$

9. 16mnx + 28mn

10. $15x^2 + 20x$

C. Factoring Polynomials with Common Monomial Factor

Factor each polynomial completely. One point each.

1. $6x^2 + 18x^3y$

2. $14a^2bx + 28ab$

3. $25x^2y - 60xy^2$

4. $26ab^2 + 52b^3$

5. $18a^2 - 72a^4$

 $\mathbf{6.} \ \ 22x^3y + 11x^2y^2 + 44xyz$

7. $32x^2 - 64x^3y$

8. $90x^2y^3 + 18x^3y$

9. $36mn^2x + 81mn^3$

10. $25x^2y + 30xy^2$