

(Fill in the words for the acronym)

G reatest C ommon F actor WS

Initials: \_\_\_\_\_

#1-5, Find the GCF of each set of numbers:

1. 30, 50

10

2. 30, 75

15

3. 6, 72

6

4. 21, 77, 63

7

5. 24, 60, 48

12

#6-10, Find the GCF for each set of monomials.

6.  $4a^3, 9a^2$

$a^2$

7.  $6w^2, 15w^2$

$3w^2$

8.  $4xy^4, 8xy$

$4xy$

9.  $4z^2, 2z^6, 10z$

$2z$

10.  $12x^2, 18y^2, 24z^2$

6

#11-22, Factor each polynomial. First step of Factoring - GCF!

11.  $6b^2 - 15b^3$

$3b^2(2 - 5b)$

12.  $8x^2 + 18y^2$

$2(4x^2 + 9y^2)$

13.  $z^3 + 4z^2$

$z^2(z + 4)$

14.  $10v^4 + 5v^3$

$5v^3(2v + 1)$

15.  $18f^5 + 12f^2 + 9f$

$3f(6f^4 + 4f + 3)$

16.  $11t^{10} + 17t^7$

$t^7(11t^3 + 17)$

17.  $8q^2 + 10q - 6$

$2(4q^2 + 5q - 3)$

18.  $16x^3 - 4x$

$4x(4x^2 - 1)$

19.  $k^4 + 2k^3 + 3k^2 + 4k$

$k(k^3 + 2k^2 + 3k + 4)$

20.  $x^2y + 2y$

$y(x^2 + 2)$

21.  $33q^3r + 33q^2r^2 + 33qr^3$

$33qr(q^2 + qr + r^2)$

22.  $a^3b^2 + a^3b^4 + ab^4$

$ab^2(a^2 + a^2b^2 + b^2)$

#23-25, Review: Perform the indicated operation.

23.  $(4x^2 - 3x + 5) + (7x^2 - 5x - 7)$

$11x^2 - 8x - 2$

24.  $(3x - 1)(7x + 2)$

$21x^2 - x - 2$

25.  $(4x + 5)^2$

$16x^2 + 40x + 25$