

WS 7.4 - Greatest Common Factor

Date _____ Period _____

Find the greatest common factor of the terms provided.

1) $21x^3y^3z^2$, $35x^2yz^4$

2) $45x^6y^3z^2$, $24x^4y^5z$

3) $42x^2yz$, $36x^8y^5z$

4) $12xyz$, $3x$

5) $15xy^2z^2$, $8a^2bc^2$

6) $48x^3y^3z^3$, $24x^2y^5z$

Factor the common factor out of each expression. (IF THE LEADING COEFFICIENT IS NEGATIVE, FACTOR OUT THE NEGATIVE)

7) $63x^7 - 63x^5 - 27x^4$

8) $-36x^2 + 54x - 6$

9) $36p^5 - 16p^3 + 12p$

10) $-20x^7 + 4x^5 - 28x^4 + 40x^2$

11) $30a^5b^3 + 15a^2b^4 + 9a^2b^2$

12) $54x^7y^3 + 60x^6y^3 + 60x^6y$

What two numbers can you multiply to get "C" and add to get "B"?

13) 1) $b = -21$ $c = 104$

2) $b = 24$ $c = -256$

3) $b = 24$ $c = 128$

4) $b = -5$ $c = -150$