**Math 10C Factoring Polynomials Quiz Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. a) Write the prime factorization of each expression.

 

b) Determine the greatest common factor of and.

1. Completely factor the following polynomial expressions:
2.  b) 
3.  d) 
4.  f) 
5.  h) 

*Use the following information to answer question 3.*

Jolene factored  completely to get a product of. Her work is shown below.



1. a) Circle the first error in Jolene’s calculations from her work shown above.
2. Provide a complete and correct factorization of.
3. Using, verify your solution by substitution.



1. A Math 10 student named Paulie Nomial discovers a cell phone left behind in math class. The area of the number pad on the cell phone is represented by the expression (2*x*2 + 7*x* -30).

a) Factor the expression to determine the binomials that could represent the length and width of the number pad.

 b) Verify your solution using distribution.

*Circle the number of each question where you missed something.*

*In the Percent Correct column, record the percent of questions worked correctly for each category.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Content | Question Number | Simple Mistake | More study Needed  | Percent (%) Correct |
| Prerequisites |
| Greatest Common Factor | 1, 2a, c, e |  |  |  |
| Prime Factorization | 1 |  |  |  |
| Distributive Property | 2a, 4b |  |  |  |
| Substitution | 3c |  |  |  |
| SO 5: Demonstrate an understanding of common factors and trinomial factoring, concretely, pictorially, and symbolically. |
| Determine the common factors in the terms of a polynomial, and express the polynomial in factored form. | 1, 2 |  |  |  |
| Record the factoring of a trinomial symbolically. | 2, 3 |  |  |  |
| Identify and explain errors in a polynomial factorization. | 3 |  |  |  |
| Factor a polynomial, and verify by multiplying the factors. | 2a |  |  |  |
| Express a polynomial as a product of its factors. | 2, 4 |  |  |  |