Math099 Week 6 assignment

Fill and upload this assignment, or take a pic and upload. One file please. Show any

work that you do not do in your head, that leads to your answers.

Simplify a to d by collecting like terms, or expanding to get rid of brackets:

|  |  |  |
| --- | --- | --- |
| a. (14xy2)0 | b. 6m + 7n + 14m – 2n | |
| c. ( -6m³n² )( 9mn) | d. | |
|  | |
| e. Evaluate the expression  given x = -4 and y = 3 | f. Find the degree of  .  C:\Users\Jane\AppData\Local\Temp\ksohtml316\wps22.pngC:\Users\Jane\AppData\Local\Temp\ksohtml316\wps23.png |

g. Given the polynomial

Arrange the expression in descending order of degree.

Multiply / expand. Answer in simplified form.

|  |  |
| --- | --- |
| h. 4x²y( 2x² + 6xy - y) = | i. (x - 6 )(x + 6 )= |
| j. 6x(4x - 5 )(x + 1 )= | k. (3x - 4y )(x + 5y )= |
| l. (3a – b)2 | m. (2y + 5)(7y – 4) |

n. Divide 4x3 + 7x2 + 10x + 6 by (4x – 1) using long division. Show all work.

Divisor:\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Dividend:\_\_\_\_\_\_\_\_\_\_\_\_

Quotient:\_\_\_\_\_\_\_\_\_\_\_\_

Remainder:\_\_\_\_\_\_\_\_\_\_\_

Factor each of the following polynomials. \*\*SHOW solution steps where you don’t do the factoring in your head.

|  |  |
| --- | --- |
| 1. 48m2 + 24m | 2. x2 + 11x + 28 |
| 3. 3x2 + x + 2 | 4. x2 – x - 30 |
| 5. 4x – 12 + xy – 3y | 6. 36x2y2  - 18xy2 + 54x3y |
| 7. 3x2 + 3x – 168 | 8. 9x2 + 12x + 4 |
| 9. 3y2 + 13y – 10 | 10. (x – 5)2  - 9 |

|  |  |
| --- | --- |
| 11. 9x2 - 25 | 12. y(x – 7) + 3(x – 7) |