Math 3 Name_____

Unit 8.1 Long Division of Polynomials easy PRACTICE

Period____

Divide.

1) $(30a^3 + 10a^2 + 10a) \div 10a$

$3a^2 + a + 1$

2) $(3v^4 + 8v^3 + 4v^2) \div 8v^2$

$\frac{3v^2}{8} + v + \frac{1}{2}$

3) $(2x^4 - x^3 - 16x + 8x^2 + 12) \div (x - 1)$

$2x^3 + x^2 + 9x - 7 + \frac{5}{x - 1}$

4) $(2n^5 + 7n^4 - 14n - 55) \div (2n + 7)$

$n^4 - 7 - \frac{6}{2n + 7}$

5) $(9v^4 - 33v^3 - 63v^2 + 117v - 32) \div (9v - 6)$

$v^3 - 3v^2 - 9v + 7 + \frac{10}{9v - 6}$

6) $(21n^4 - 42n^3 - 6n^2 + 22) \div (3n - 6)$

$7n^3 - 2n - 4 - \frac{2}{3n - 6}$

7) $(10b^5 - 18b^3 - 17b^2 - 2b + 14) \div (b + 1)$

$10b^4 - 10b^3 - 8b^2 - 9b + 7 + \frac{7}{b+1}$

8) $(8x^3 + 35x^2 - 33x - 3) \div (8x - 5)$

$x^2 + 5x - 1 - \frac{8}{8x-5}$

9) $(2x^5 + 12 - 22x^2 + 28x - 6x^3) \div (-4 + 2x)$

$x^4 + 2x^3 + x^2 - 9x - 4 - \frac{2}{-2+x}$

10) $(10x^3 - 5x^2 - 10) \div (2x - 1)$

$5x^2 - \frac{10}{2x-1}$

11) $(9n^4 + 27n^3 - 45n^2 + 17) \div (9n - 9)$

$n^3 + 4n^2 - n - 1 + \frac{8}{9n-9}$

12) $(-64 - 38p^2 + 5p^3 + 83p) \div (5p - 8)$

$p^2 - 6p + 7 - \frac{8}{5p-8}$

13) $(8x^4 + 134x^2 + 4 + 66x^3 + 88x) \div (10 + 8x)$

$x^3 + 7x^2 + 8x + 1 - \frac{3}{5+4x}$

14) $(8m^5 - 6m^4 - 16m + 17) \div (8m - 6)$

$m^4 - 2 + \frac{5}{8m-6}$