MAT 055 Practice Test Chapter 12

All test answers are to be in simplest form. A calculator may be used.

Cell phones, iPads, and other electronic devices with scanning or photo ability may NOT be used.

No notes, no books, no homework may be used while taking this test.

Simplify the expression.
Write the answer using positive exponents.

1) $(2p^3)^4$

2) 12^0

3) -14^0

Simplify the expression.
Write the answer using positive exponents.

4) $(-7x^3)^2$

5) $(w^3z)^2(w^4z^7)$

6) $\left(\dfrac{3}{y^2}\right)^5$

7) $(-4)^{-2}$

8) $\left(\dfrac{xy^6}{z^6}\right)^0$

9) $(3p)^{-3}$

10) $-5x^{-4}y(5x^4y)z^4$

11) $(7s + 14t) + (4t - 3s)$

12) $(20x^4 + 11x^2) - (-13x^4 + 4x^2)$

13) $6xy(2x - 10y)$

14) $(-5x - 10)(-3x - 10)$

15) $(9x + 7y)(9x - 7y)$

16) $(7x + 9y)^2$

17) $(6y + 11)(5y^2 - 2y - 10)$

18) $\left(\dfrac{12x^{-3}z^3}{3xz^{-3}}\right)^{-1}$

19) $\dfrac{5^5\,x^9}{5^9\,x^3}$

20) $\dfrac{2^{-8}x^{-4}y^2}{2^{-5}x^{-7}y^4}$

21) $(x^{-2}y^{-2})(x^5y^{-5})$

22) $\dfrac{8x^2 - 4x + 1}{32x}$

23) $\dfrac{64x^3 + 56x^2 - 40x + 3}{8x}$

Divide using long division.

24) $(p^2 + 7p - 9) \div (p + 9)$

25) $\dfrac{x^2 + 4x - 32}{x + 8}$

26) $(16x^3 - 8x^2 - 7x - 1) \div (-4x - 1)$