Adv Alg 2 Week Tuesday Warm-up

Divide.

1. $(x^3+2x^2+x+17)\div(x^2-x+4)$

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

Write in standard form. Use your vocabulary to describe by degree and number of terms.

2. $(x-2)^2+4x-2$

$x^2 + 2$;quadratic, binomial

Find the zeros of the function. State the multiplicity of multiple zeros.

3. $y=x^7(x+5)^3(x-20)$

0(multiplicity 7),-5(multiplicity 3),20

Find all solutions.

4. $10x^3=20x-35x^2$

{- 4,0,1/2}

Write a polynomial function in standard form with the given zeros

5. $x=-1,2,4$

$$y=(x+1)(x-2)(x-4)$$

$$y=x^3-5x^2+2x+8$$

Simplify.

6. $\left(-3x^7y\right)^2\left(2x^6y^{-5}z^4\right)^3$

$$\frac{72x^{32}z^{12}}{y^{11}}$$