First & Last Name_____ Date _____ Period_____

6.6 Long Division Practice

Directions: Use factoring of the numerator to find quotient.

1. $\frac{x^2+8x-84}{x-6}$

x + 14

2. $6a^2 + 11a - 10 \div (3a - 2)$

2a + 5

Directions: Use Long Division.

3. $(y^2 - 3y - 20) \div (y - 7)$

$y + 4 + \frac{8}{y-7}$

4. $(2c^3 + 13c^2 + 24c + 8) \div (2c + 3)$

$c^2 + 5c + \frac{9}{2} + \frac{-11/2}{2c+3}$

5. $(x^3+2x^2-22x-45)\div(x^2-x+5)$

$x+3+\frac{-24-60}{x^2-x+5}$

6. $(2x^3-14x+10)\div(x+3)$

$2x^2-6x+4-\frac{2}{x+3}$

7. $\frac{x^4+11x^3+33x^2+24x+32}{x+6}$

$x^3+5x^2+3x+6-\frac{4}{x+6}$