1.3 Division of Polynomials Name:_____

Corrective Assignment #2

Directions: Perform the given operation.

1) $\frac{x^3+6x^2-23+7}{x-2}$

2) $\frac{10a^4+84a^3+26a^2-58a-80}{a+8}$

3) $\frac{n^3+n^2-6}{n+1}$

Directions: Pick the best choice.

4) Let $p(x) = x^4 + 6x^3 - 9x - 62$. What is the remainder when *p(x)* is divided by $(x + 6)$? Show work.

A. -1
B. 2
C. 4
D. -8

5) Let $p(x) = x^3 + 10x^2 + 26x + 12$. What is the remainder when *p(x)* is divided by $(x + 6)$? Show work.

A. 0
B. -6
C. 8
D. 10

Directions: Given one factor, factor completely.		
6) $(x+10)$ is a factor of $(x^3+5x^2-44x+60)$	7) $(x-3)$ is a factor of $(3x^3+5x^2-27x-45)$	8) $(x+5)$ is a factor of $(4x^3+20x^2-x-5)$

1.3 Division of Polynomials

Corrective Assignment Answers

1) $x^2+8x-7-\frac{7}{x-2}$ or $x^2+8x-7 \quad R-7$

2) $10a^3+4a^2-6a-10$

3) $n^2-\frac{6}{n+1}$ or $n^2 \quad R-6$

4) D

5) A

6) $(x-3)(x-2)(x+10)$

7) $(3x+5)(x+3)(x-3)$

8) $(2x+1)(2x-1)(x+5)$