Pg. A70 0.7 – Errors and the Algebra of Calculus

Ex 1:
Describe and correct the error.

$$\cancel{\frac{6x+y}{6x-y} = \frac{x+y}{x-y}}$$

Ex 2:
Insert the required factor in the parentheses.

(a) $\frac{7x^2}{10} = \frac{7}{10}(\qquad)$

(b) $x\left(1-2x^2\right)^3 = (\qquad)\left(1-2x^2\right)^3(-4x)$

Ex 3:
Write the expression using negative exponents.

$$\frac{x+1}{x(6-x)^{\frac{1}{2}}}$$

Ex 4:
Write the fraction as the sum of two or more terms.

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

Ex 5:

Simplify the expression.

$$\frac{x^5(-3)\left(x^2+1\right)^{-4}(2x)-\left(x^2+1\right)^{-3}(5)x^4}{\left(x^5\right)^2}$$