Unit 5.4 Polynomial Division

1. Divide the following polynomials

a. $\frac{8y^3 - 16y^2 + 24y}{8y} =$ _____

b. $\frac{110x^4 - 121x^3 + 11x^2}{11x} =$ _____

c. $\frac{x^2 - 2x - 20}{x + 4} =$ _____

d. $\frac{2x^3 + 7x^2 + 10x - 6}{2x + 3} =$ _____

e. $\frac{x^3 - 9x^2 + 8x - 3}{x - 8} =$ _____

f. $\frac{6x^3 + 11x^2 + 25}{2x + 5} =$ _____

g. $\frac{3x^3 + 5x^2 + 7x + 9}{x^2 + 2} =$ _____

h. $\frac{x^3 - 27}{x - 3} =$ _____

2. Suppose that a polynomial is divided by (3x – 2) and the answer is given as
   $x^2 + 2x + 4 + \frac{20}{3x - 2}$
   What was the original polynomial?