## Math-1003b Homework #13

## Reading

• Sections 10.4 to 10.7.

## **Problems**

1). Simplify completely. You answer should contain no negative exponents (Hint: convert to rational exponents):

$$\frac{\sqrt{2x^3\sqrt[3]{y^2}}}{\sqrt[3]{16xy^2}}$$

2). Simplify:

$$x\sqrt[3]{128x^5y^3} - x^2\sqrt[3]{2x^2y^2} + 5\sqrt[3]{16x^8y^2}$$

3). Rationalize the denominator and simplify:

$$\frac{2xy}{\sqrt[5]{16x^4y^9}}$$

4). Solve for *x*:

$$\sqrt{2x+6} = \sqrt{7-2y} + 1$$