REVIEW TEST 2 - Chapters 5, 6 and 7

Note: Test #2 will be on Wednesday, April 25

To prepare for the test, you may study the following:

Quiz #2

Handout: Chapter 5 (see website for handout)

Section 6.1 - # 47, 48, 72, 97, 101, 102, 105 – 108   Section 6.6 - # 7, 15, 29, 31, 34, 37, 38, 39 – 45, 47, 50

Section 6.2 - # 69, 95, 96, 97   Section 6.7 - # 1, 9, 10, 12, 15 – 18, 39, 42

Section 6.3 - #3, 12, 18, 27, 36   Chapter 6 Review (page 477) - # 1 – 16, 24

Section 6.4 - #21, 23, 27, 29, 33

Section 7.1 - # 30, 90, 91, 92, 93, 95, 96, 101   Section 7.5 - # 113 – 116, 143, 144

Section 7.2 - # 113 – 128   Section 7.6 - # 25, 33, 39, 49, 74

Section 7.3 - # 93 – 96

Section 7.7 - #19, 22, 25, 28, 31, 34, 37, 40, 43, 46, 49, 52, 55, 58, 61, 67, 73, 79, 101, 103, 109, 111, 113, 114

<u>More practice</u>

1. Simplify the following expressions. The final answer should have only positive exponents.

a) $\dfrac{6^{\frac{5}{6}}}{6^{\frac{1}{2}}} + 6^{\frac{1}{3}}(6^{-\frac{1}{2}})$ b) $\left(\dfrac{2x^{-4}y}{x^5 y^5}\right)^{-3}\left(\dfrac{4x^{-2}y^0}{x^7 y^2}\right)^2$ c) $\dfrac{\left(-2x^2 y^3\right)^2 \left(3x^4 y^5\right)^3}{\left(2x^2\right)^6 \left(3y^8\right)}$ d) $\left(\dfrac{2x^{-\frac{1}{2}}y}{x^{\frac{5}{2}}y^{-\frac{1}{3}}}\right)^{-\frac{2}{3}}$

2. Write each expression in simplest form:

a) $\sqrt{18u^3 v^8} + 3v\sqrt{30u^5}$ b) $2\sqrt{75} + 4\sqrt{12} - \left(2\sqrt{2} - \sqrt{3}\right)\left(2\sqrt{2} + \sqrt{3}\right)$ c) $\left(3\sqrt{5} - 4\right)^2 + 2\sqrt{45}(5 - \sqrt{5})$

d) $-(3 + 2x)i - 2(2x - 3i)^2$ e) $2\sqrt[3]{x^4 y^2} + 2x\sqrt[3]{xy^2}$

3. Simplify:

a) $\dfrac{9 - \sqrt{-72}}{12}$ b) $\dfrac{2 + \sqrt{-8}}{2}$ c) $\dfrac{-4 + \sqrt{-28}}{6}$