NAME: _____ DATE: _____

RADICALS REVIEW

Work on your own first and attempt the problems. Check your answer with others. Get help from someone if you get stuck on a problem or set of problems.

Question Set 1:

Write each as a mixed radical, in simplest form:

A) $\sqrt{63}$ B) $\sqrt{80}$ C) $\sqrt{864}$ D) $\sqrt{98}$ E) $\sqrt{220}$

Question Set 2:

Write each mixed radical in simplest form:

A) $3\sqrt{45}$ B) $-12\sqrt{27}$ C) $2\sqrt{720}$ D) $-15\sqrt{40}$ E) $7\sqrt{108}$

Question Set 3:

Simplify by multiplying: (Write your answers in simplest form.)

A) $\left(3\sqrt{5}\right)\left(8\sqrt{2}\right)$ B) $\left(2\sqrt{6}\right)\left(\sqrt{3}\right)$ C) $\left(-5\sqrt{10}\right)\left(-6\sqrt{15}\right)$

Question Set 4:

Simplify by adding or subtracting:

A) $7\sqrt{2}-10\sqrt{2}$ B) $8\sqrt{7}-5\sqrt{7}+12\sqrt{7}$ C) $\sqrt{13}+3\sqrt{13}-9\sqrt{13}$

Question Set 5:

Write all radicals in simplest form, then simplify by adding or subtracting:

A) $2\sqrt{27}+5\sqrt{3}$ B) $2\sqrt{20}-\sqrt{500}$ C) $3\sqrt{24}-2\sqrt{384}-\sqrt{96}$

Question Set 6:

Simplify by dividing: (Write your answers in simplest form.)

A) $\dfrac{\sqrt{21}}{\sqrt{3}}$ B) $\dfrac{-15\sqrt{40}}{-5\sqrt{5}}$ C) $\dfrac{36\sqrt{160}}{-3\sqrt{8}}$