

TRIG RADICALS REVIEW NOTES

1. Write each as a mixed radical, in simplest form:

A) $\sqrt{63}$

B) $\sqrt{80}$

C) $\sqrt{98}$

2. Write each mixed radical in simplest form:

A) $3\sqrt{45}$

B) $-12\sqrt{27}$

C) $-15\sqrt{40}$

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

A) $(3\sqrt{5})(8\sqrt{2})$

B) $(2\sqrt{6})(\sqrt{3})$

C) $(-5\sqrt{10})(-6\sqrt{15})$

4. Simplify by adding or subtracting:

A) $7\sqrt{2} - 10\sqrt{2}$

B) $8\sqrt{7} - 5\sqrt{7} + 12\sqrt{7}$

C) $\sqrt{13} + 3\sqrt{13} - 9\sqrt{13}$

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) $3\sqrt{24} - 2\sqrt{384} - \sqrt{96}$

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

A) $\frac{\sqrt{21}}{\sqrt{3}}$

B) $\frac{-15\sqrt{40}}{-5\sqrt{5}}$

C) $\frac{36\sqrt{160}}{-3\sqrt{8}}$

7. Simplify by rationalizing the denominators: (Write your answers in simplest form.)

A) $\frac{2}{\sqrt{3}}$

B) $\frac{8\sqrt{11}}{2\sqrt{2}}$

C) $\frac{\sqrt{3}}{5\sqrt{6}}$

8. Simplify by multiplying. Remember to simplify each final radical as well!

a) $(2 + 2\sqrt{3})(5 - \sqrt{3})$

b) $(-4\sqrt{2})(3\sqrt{2})$

c) $(3\sqrt{2}) \times (2\sqrt{3})$

