

**Unit 1: Radicals Lesson 1.2****Coach's Corner – III**

1. Simplify the following. Use exact values only and show all steps.

a.  $4\sqrt{2} + 4\sqrt{2} - 2\sqrt{8}$

$$= 8\sqrt{2} - 2\sqrt{2^2 \times 2}$$

$$= 8\sqrt{2} - 2 \times 2\sqrt{2}$$

$$= 8\sqrt{2} - 4\sqrt{2}$$

$$= 4\sqrt{2}$$

b.  $2\sqrt{8} + 3\sqrt{18} - \sqrt{50}$

$$= 2\sqrt{2^2 \times 2} + 3\sqrt{3^2 \times 2} - \sqrt{5^2 \times 2}$$

$$= 2 \times 2\sqrt{2} + 3 \times 3\sqrt{2} - 5\sqrt{2}$$

$$= 4\sqrt{2} + 9\sqrt{2} - 5\sqrt{2}$$

$$= 8\sqrt{2}$$

c.  $4\sqrt{2} + 3\sqrt{2} - \sqrt{16}$

$$= 7\sqrt{2} - 4$$

Please return to *Unit 1: Radicals Lesson 1.2* to continue your training.