

Name : _____

Score : _____

Teacher : _____

Date : _____

Adding, Subtracting, and Multiplying Radicals

Simplify each expression.

1) $\sqrt{13} \cdot \sqrt{2}$

6) $5\sqrt{52} - 4\sqrt{117} - 3\sqrt{7}$

2) $\sqrt{14} \cdot \sqrt{2}$

7) $5\sqrt{150} + 6\sqrt{24} + 2\sqrt{11}$

3) $4\sqrt{6} (8 + 2\sqrt{10})$

8) $7\sqrt{2} - 5\sqrt{2}$

4) $8\sqrt{10} (7 + 2\sqrt{6})$

9) $\sqrt{40} - 3\sqrt{40}$

5) $2\sqrt{20} - 6\sqrt{20} + 3\sqrt{20}$

10) $\sqrt{28} - 6\sqrt{28}$



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Adding, Subtracting, and Multiplying Radicals

Simplify each expression.

1) $\sqrt{13} \cdot \sqrt{2}$

$$\sqrt{26}$$

6) $5\sqrt{52} - 4\sqrt{117} - 3\sqrt{7}$

$$-2\sqrt{13} - 3\sqrt{7}$$

2) $\sqrt{14} \cdot \sqrt{2}$

$$\sqrt{28}$$

7) $5\sqrt{150} + 6\sqrt{24} + 2\sqrt{11}$

$$37\sqrt{6} + 2\sqrt{11}$$

3) $4\sqrt{6} (8 + 2\sqrt{10})$

$$32\sqrt{6} + 8\sqrt{60}$$

8) $7\sqrt{2} - 5\sqrt{2}$

$$2\sqrt{2}$$

4) $8\sqrt{10} (7 + 2\sqrt{6})$

$$56\sqrt{10} + 16\sqrt{60}$$

9) $\sqrt{40} - 3\sqrt{40}$

$$-4\sqrt{10}$$

5) $2\sqrt{20} - 6\sqrt{20} + 3\sqrt{20}$

$$-2\sqrt{5}$$

10) $\sqrt{28} - 6\sqrt{28}$

$$-10\sqrt{7}$$

