



Adding and Subtracting Radical Expressions

Version 1

Name: _____

Date: _____

Score: _____

Direction: Simplify by adding and subtracting the following radical expressions. Show all your work in the space provided.

1) $\sqrt{32} - 2\sqrt{24} + 3\sqrt{18} - 5\sqrt{8} =$

2) $\sqrt{48} + 4\sqrt{2} - 2\sqrt{75} - \sqrt{3} =$

3) $-5\sqrt{28} + 2\sqrt{63} + 2\sqrt{75} - \sqrt{147} =$

4) $\sqrt{25x^5} - 2x^2\sqrt{x} + 7\sqrt{16y^7} - y^3\sqrt{y} =$

5) $-7\sqrt{x^3} - 3\sqrt{y^5} + 5x\sqrt{x} + 2y^2\sqrt{y} =$

6) $\sqrt{xy^3z^4} - yz^2\sqrt{xy} + z^2\sqrt{4xy} =$



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Direction: Simplify by adding and subtracting the following radical expressions. Show all your work in the space provided.

1) $\sqrt{32} - 2\sqrt{24} + 3\sqrt{18} - 5\sqrt{8} =$

$3\sqrt{2} - 4\sqrt{6}$

2) $\sqrt{48} + 4\sqrt{12} - 2\sqrt{75} - \sqrt{3} =$

$\sqrt{3}$

3) $-5\sqrt{28} + 2\sqrt{63} + 2\sqrt{75} - \sqrt{147} =$

$-4\sqrt{7} + 3\sqrt{3}$

4) $\sqrt{25x^5} - 2x^2\sqrt{x} + 7\sqrt{16y^7} - y^3\sqrt{y} =$

$3x^2\sqrt{x} + 27y^3\sqrt{y}$

5) $-7\sqrt{x^3} - 3\sqrt{y^5} + 5x\sqrt{x} + 2y^2\sqrt{y} =$

$-2x\sqrt{x} - y^2\sqrt{y}$

6) $\sqrt{xy^3z^4} - yz^2\sqrt{xy} + z^2\sqrt{4xy} =$

$2z^2\sqrt{xy}$