

Add or subtract. Assume all variables represent positive real numbers.

1) $\sqrt{98} - 3\sqrt{8} + 9\sqrt{128}$

1) _____

2) $\sqrt{49} + \sqrt{720} + \sqrt{100} + \sqrt{405}$

2) _____

Multiply, and then simplify if possible. Assume all variables represent positive real numbers.

3) $(\sqrt{7} + 5)(\sqrt{7} - 5)$

3) _____

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

4) _____

Rationalize the denominator and simplify. Assume that all variables represent positive real numbers.

5) $\frac{\sqrt{11}}{\sqrt{5}}$

5) _____

6) $\frac{3}{\sqrt{125x}}$

6) _____

7) $\frac{3}{\sqrt{x} + 4}$

7) _____

8) $\frac{3}{\sqrt{6} - 4}$

8) _____