

## M\$5 Homework 19

In 1 – 5, express in simplest radical form.

1.  $\sqrt{63} - \sqrt{28}$

2.  $\sqrt{160} - \sqrt{40} + \sqrt{90}$

3.  $4\sqrt{27} - 6\sqrt{\frac{3}{4}} + 8\sqrt{48}$

4.  $\frac{\sqrt{50} - \sqrt{8}}{4\sqrt{2}}$

5.  $(9 - \sqrt{2})(7 + \sqrt{2})$

6. When two resistors are connected in a parallel circuit, the total resistance is  $\frac{1}{\frac{1}{R_1} + \frac{1}{R_2}}$ .

This complex fraction is equivalent to

(1)  $R_1 + R_2$

(3)  $R_1R_2$

(2)  $\frac{R_1 + R_2}{R_1R_2}$

(4)  $\frac{R_1R_2}{R_1 + R_2}$