

YOUR NAME: \_\_\_\_\_

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Read each problem **very carefully** before starting to solve it. Each problem is worth 5 points. It is necessary to show **all** your work. Correct answers without explanations are worth 0 points. GOOD LUCK!!

1. Simplify the following expressions:

(a)  $(2\sqrt{2}) \div (4\sqrt{10}) =$

(b)  $\frac{4 - \sqrt{28}}{6\sqrt{7}} =$

2. Simplify the following expressions, where all variables are representing positive real numbers:

(a)  $\frac{6}{3 - \sqrt{18}} =$

(b)  $\frac{1}{\sqrt{x}} + \frac{1}{1 - \sqrt{x}} =$