**LT #4: Rational Exponents**

Simplify the expression without the use of a calculator. Write answers
with positive exponents only. (2 pts each)

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. $4^{-\frac{3}{2}}$ 2. $(9^{\frac{1}{4}}∙4^{\frac{1}{4}})^{2}$ 3. $\left(\frac{16x^{6}}{25y^{10}}\right)^{\frac{1}{2}}$

 /6

**LT #5: Solving Radical Equations**

Solve the following equations. Show your work when you check for
extraneous solutions. (4 pts each)

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. $2+\sqrt{3x-3}=8$ 2. $\sqrt{y-15}=3+\sqrt{y}$

 Check: Check:

3. $(2x+1)^{\frac{1}{4}}=3$

 /12

 Check: