

MATH 111 WORKSHEET 1

Show all work for full credit.

1. Find the following sums or differences. Express answers reduced to lowest terms.

a. $\frac{3}{10} + \frac{7}{15} - \frac{9}{25}$

b. $\frac{2}{3} + \frac{3}{5} - \frac{7}{12}$

2. Simplify the following complex fraction. Express your answer in lowest terms.

$$\frac{3 + \frac{2}{3}}{\frac{1}{4} + \frac{5}{12}}$$

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3. Simplify each of the following. Express answers with positive exponents only.

a. $(2m^{-4}n^2)^{-2}(-2m^2n^{-4})^3$

b. $\left(\frac{6m^{-5}n^2}{3m^2n^{-6}}\right)^2$

c. $\frac{(2x^{-3}y^2)^4(3xy^{-3})^{-2}}{(3x^{-4}y^{-2})^{-4}}$