

$$20/20 = 100$$

Foundations of College Algebra

Spring 2017

Quiz #4 - M. Goodroe

Name

Key

Date

SHOW ALL WORK ON QUIZ! Simplify completely.

Simplify.

$$1) \frac{11}{12} - \frac{2}{3} \cdot 1\frac{1}{7} \quad \frac{11}{12} - \frac{2}{3} \cdot \frac{8}{7}$$
$$\frac{0}{7} \quad \frac{11}{12} - \frac{16}{21} = \frac{231 - 192}{252} = \frac{39}{252} = \boxed{\frac{13}{84}}$$

$$2) \left(\frac{1}{2}\right)^2 \cdot \left(\frac{1}{2} - \frac{1}{3}\right) \quad \frac{1}{4} \cdot \left(\frac{3-2}{6}\right)$$
$$\frac{1}{4} \cdot \frac{1}{6} = \boxed{\frac{1}{24}}$$

$$3) \left(1 - \frac{2}{7}\right)^2 \quad \left(\frac{7-2}{7}\right)^2 = \left(\frac{5}{7}\right)^2 = \boxed{\frac{25}{49}}$$

Simplify the complex fraction.

$$4) \frac{3 - \frac{1}{6}}{5 - \frac{1}{2}} = \frac{\frac{18-1}{6}}{\frac{10-1}{2}} = \frac{\frac{17}{6} \text{ K}}{\frac{9}{2} \text{ F}} = \frac{17}{6} \cdot \frac{2}{9} = \boxed{\frac{17}{27}}$$

$$5) \frac{\frac{1}{35} \text{ K}}{\frac{1}{20} \text{ F}} = \frac{1}{\cancel{35}} \cdot \frac{\cancel{20}}{1} = \boxed{\frac{4}{7}}$$