

Sample quiz

Math 141 – Spring 2004

NAME: Key

quiz # 6

15

sections 6.1 - 6.3

Seat: _____

Partial credit is based on work shown!

7pts

1. a. Which fraction is smaller, $\frac{5}{6}$ or $\frac{8}{9}$? $\frac{5}{6}$ Show what you did to determine this.

Use common denominator

$$\frac{15}{18} \quad \frac{16}{18}$$

or cross multiply

$$5 \cdot 9 \quad 6 \cdot 8$$

$$45 < 48$$

- b. Find a fraction between the fractions $\frac{5}{6}$ and $\frac{8}{9}$.

(infinite # of answers)

$$\frac{1500}{1800} \quad \frac{1600}{1800}$$

or

$$\frac{30}{36} \quad \frac{31}{36} \quad \frac{32}{36}$$

- c. Add the two fractions, showing your steps.

$$\frac{3}{3} \cdot \frac{5}{6} + \frac{8}{9} \cdot \frac{2}{2} = \frac{15}{18} + \frac{16}{18} = \frac{31}{18} = 1 \frac{13}{18}$$

2pts

2. Estimate using compatible numbers.

$$35 \frac{1}{6} \div 8 \frac{4}{5}$$

$$36 \div 9 = 4$$

*

3pts

3. Calculate mentally using the distributive property.

$$14 \times 2 \frac{4}{7}$$

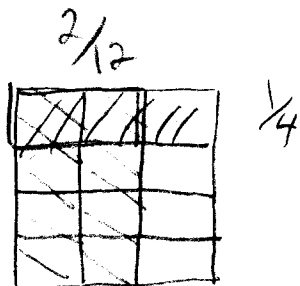
$$14 \left(2 + \frac{4}{7} \right) = 14(2) + 14 \left(\frac{4}{7} \right)$$

$$28 + 8$$

$$36$$

3pts

4. Illustrate $\frac{1}{4}$ of $\frac{2}{3}$ using a rectangular diagram. Clearly label the diagram to indicate each fraction and the answer.



$$\frac{1}{4} \times \frac{2}{3} = \frac{2}{12}$$

$$\frac{2}{3}$$