## Math 01, Homework 4 on Sections 3.1 - 3.5 Hand in by Wed, Mar 9 at the start of class.

Write all your working out and answers on a separate sheet. It is very important that you show clearly any work you had to do to get the answer. These first ten questions are 2 points each and the answers are on page 2.

- (1) Simplify: (a)  $\frac{0}{5}$ , (b)  $\frac{6}{6}$ , (c)  $\frac{8}{1}$
- (2) Convert to a mixed number:  $\frac{7}{3}$
- (3) Convert to a mixed number:  $\frac{101}{9}$
- **(4)** Five people share nine small pizzas fairly. Used mixed numbers to say how much pizza each gets.
- (5) Convert to an improper fraction:  $5\frac{3}{7}$
- **(6)** Calculate: **(a)**  $\frac{2}{3} \cdot \frac{5}{3}$  **(b)**  $\frac{1}{5} \cdot \frac{3}{2} \cdot 7$
- (7) Compute one half of one quarter.
- (8) Write four different fractions equivalent to  $\frac{1}{4}$
- (9) Reduce to lowest terms:  $\frac{6}{36}$
- (10) Reduce to lowest terms:  $\frac{26}{39}$

These next eight questions are 2 points each. Show clearly all your working out and reasoning.

- **(11)** Simplify: **(a)**  $\frac{9}{9}$ , **(b)**  $\frac{0}{2}$ , **(c)**  $\frac{3}{1}$
- (12) Convert to a mixed number:  $\frac{101}{7}$
- (13) Four people share 13 chocolate bars fairly. Used mixed numbers to say how many bars each gets.

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(14) Convert to an improper fraction:  $4\frac{3}{10}$ 

**(15)** Calculate: **(a)**  $\frac{2}{5} \cdot \frac{3}{7}$  **(b)**  $\frac{4}{7} \cdot \frac{2}{3} \cdot 5$ 

(16) Compute one quarter of one third.

(17) Write four different fractions equivalent to  $\frac{2}{5}$ 

(18) Reduce to lowest terms:  $\frac{20}{28}$ 

## Answers to questions (1)-(10):

(1) **(a)** 0, **(b)** 1, **(c)** 8

(2)  $2\frac{1}{3}$ 

(3)  $11\frac{2}{9}$ 

(4)  $\frac{9}{5} = 1\frac{4}{5}$ , so each person gets  $1\frac{4}{5}$  pizzas.

(5)  $\frac{38}{7}$ 

(6) (a)  $\frac{10}{9}$  (b)  $\frac{21}{10}$ 

(7)  $\frac{1}{2} \cdot \frac{1}{4} = \frac{1}{8}$ , so the answer is one eighth.

(8) Examples of four different fractions equivalent to  $\frac{1}{4}$  are:  $\frac{2}{8}$ ,  $\frac{3}{12}$ ,  $\frac{10}{40}$ ,  $\frac{200}{800}$ 

(9)  $\frac{1}{6}$ 

(10)  $\frac{2}{3}$