MAT 104 Supplemental Worksheet 2. ARITHMETIC REVIEW - Part A

1. Convert the following improper fractions to mixed numbers.

a) $\frac{10}{4}$ b) $\frac{67}{13}$ c) $\frac{9}{5}$ d) $\frac{59}{15}$ e) $\frac{64}{19}$

2. Convert the mixed numbers to improper fractions.

a) $5\frac{3}{8}$ b) $10\frac{4}{7}$ c) $6\frac{4}{5}$ d) $5\frac{2}{3}$ e) $12\frac{1}{4}$

3. Perform the indicated operations and write the answer in lowest terms.

a) $12\frac{1}{3}+10\frac{1}{2}$ b) $2\frac{3}{8}+4\frac{1}{3}$

c) $3\frac{3}{8}-2\frac{5}{6}$ d) $7\frac{5}{8}-6\frac{3}{4}$

e) $2\frac{2}{3}\times5\frac{1}{2}$ f) $3\frac{1}{5}\times2\frac{1}{4}$

g) $2\frac{1}{3}\div3\frac{1}{2}$ h) $3\frac{3}{4}\div1\frac{3}{7}$

4. Convert the following fractions to decimals by changing the fractions to equivalent fractions with denominators as powers of 10.

a) $\frac{21}{5}$ b) $\frac{67}{25}$ c) $\frac{13}{2}$ d) $\frac{3}{8}$ e) $\frac{145}{125}$

5. Perform the indicated operations.

a) $2.37+2.63$ b) $5.021+0.979$

c) $6+7.08$ d) $0.12+4.08$

e) $3.08-1.14$ f) $5.886-1.237$

g) $2-1.73$ h) $5-3.44$

i) 0.03×0.2 j) 0.15×100

k) 0.15×5.7 l) 472.4×0.001

m) $37.5\div0.01$ n) $6.45\div0.1$

o) $3.47\div1000$ p) $0.45\div100$

6. Solve the following proportions for *x*.

a) $15 : 30 = x : 10$

b) $0.12 : 0.8 = 3 : x$

c) $125 : 4 = 50 : x$

d) $7 : 1 = x : 8.8$

e) $x : 0.08 = 0.7 : 0.4$

f) $\frac{1}{4} : 1.6 = 0.5 : x$

7. Convert between percent and decimal.

	Percent	Decimal
a)	5 %	
b)		0.009
c)	0.225%	
d)		0.0045
e)	3.5%	

8. If one tablet contains 250 mg (milligrams) of medication, then how many milligrams of medication would 2 ½ tablets contain?

9. A client weighed 185 ¼ Lb (pounds) on a first visit to the doctor. If the client gained 2 1/2 Lb on the next visit, how much does the client weigh?

10. A client, who originally weighed 95.6 kg (kilograms), lost 1.8 kg, followed by a gain of 4.3 kg. How much the client weigh was at the end of the process?

11. A prescriber orders 0.5 mg (milligrams) of a medication. The medication is available 0.125 mg tablets. How many tablets should be given?

12. The client consumed 65 % of 12-ounce (Oz) cup of water. How many ounces did the client drink?

Answers:

1. a) $2\frac{1}{2}$, b) $5\frac{2}{13}$, c) $1\frac{4}{5}$, d) $3\frac{14}{15}$, e) $3\frac{7}{19}$. **2.** a) $\frac{43}{8}$, b) $\frac{74}{7}$, c) $\frac{34}{5}$, d) $\frac{17}{3}$, e) $\frac{49}{4}$. **3.** a) $22\frac{5}{6}$, b) $6\frac{17}{24}$, c) $\frac{13}{24}$, d) $\frac{7}{8}$, e) $14\frac{2}{3}$, f) $7\frac{1}{5}$, g) $\frac{2}{3}$, h) $2\frac{5}{8}$. **4.** a) $\frac{42}{10} = 4.2$, b) $\frac{268}{100} = 2.68$, c) $\frac{65}{10} = 6.5$, d) $\frac{375}{1000}0.375$, e) $\frac{1160}{1000} = 1.16$. **5.** a) 5, b) 6, c) 13.08, d) 4.2, e) 1.94, f) 4.649, g) 0.27, h) 1.56, i) 0.006, j) 15, k) 0.855, l) 0.4724, m) 3750, n) 64.5, o) 0.00347, p) 0.0045. **6.** a) $x = 5$, b) $x = 20$, c) $x = 1.6$, d) $x = 61.6$, e) $x = 0.14$, f) $x = 3.2$. **7.** a) 0.05, b) 0.9%, c) 0.00225, d) 0.45%, e) 0.035. **8.** 625 mg. **9.** $187\frac{3}{4}$ Lb. **10.** 98.1 kg. **11.** 4 tablets. **12.** 7.8 Oz