

Name: Answers

Date: _____

Period: _____

Math 8 – Review for Quiz

Part I: Decimal Operations

1) a) $326.9 + 4138 + 88.82$

$$\begin{array}{r} 326.90 \\ 4138.00 \\ + 88.82 \\ \hline 4553.72 \end{array}$$

= 4553.72

b) round answer to nearest *hundreds* place

= 4600

2) $26.86 + 0.925 + 12$

$$\begin{array}{r} 26.860 \\ 0.925 \\ + 12.000 \\ \hline 39.785 \end{array}$$

= 39.785

b) round answer to nearest *tenths* place

= 39.8

3) $10.34 - 2.287$

$$\begin{array}{r} 10.340 \\ - 2.287 \\ \hline 8.053 \end{array}$$

= 8.053

b) round answer to nearest *ones* place

= 8

4) $20 - 11.95$

$$\begin{array}{r} 20.00 \\ - 11.95 \\ \hline 8.05 \end{array}$$

= 8.05

5) 0.38×1.6

$$\begin{array}{r} 0.38 \\ \times 1.6 \\ \hline 228 \\ + 380 \\ \hline 608 \end{array}$$

0.608

6) 24.55×0.004

$$\begin{array}{r} 24.55 \\ \times 0.004 \\ \hline 9820 \end{array}$$

= 0.0982

b) round answer to nearest *thousandths* place

= 0.098

7) $52 \div 2.6$

$$\begin{array}{r} 20. \\ 2.6 \overline{) 52.0} \\ \underline{-52} \\ 00 \\ \underline{-0} \\ 0 \end{array}$$

= 20

8) $0.0054 \div 0.02$

$$\begin{array}{r} .27 \\ 0.02 \overline{) 0.0054} \\ \underline{-4} \\ 14 \\ \underline{-14} \\ 0 \end{array}$$

= 0.27

Part II: Converting Decimals & Fractions

1) Convert each decimal to a fraction (in simplest form):

a) 0.36

$$= \frac{36}{100} \div 4 = \boxed{\frac{9}{25}}$$

b) 8.0375

$$8 \frac{375}{10000} = \boxed{8 \frac{3}{80}}$$

c) $0.\overline{18}$

$$\frac{18}{99} = \boxed{\frac{2}{11}}$$

2) Convert each fraction to a decimal:

a) $\frac{17}{8}$

$$\begin{array}{r} 2.125 \\ 8 \overline{) 17.000} \\ \underline{-16} \\ 10 \\ \underline{-8} \\ 20 \\ \underline{-16} \\ 40 \\ \underline{-40} \\ 0 \end{array}$$

$$\boxed{2.125}$$

b) $\frac{4}{25} = \boxed{.16}$

$$\begin{array}{r} .16 \\ 25 \overline{) 4.00} \\ \underline{-25} \\ 150 \end{array}$$

c) $5\frac{6}{11} = \boxed{5.\overline{54}}$

$$\begin{array}{r} .5454 \dots \\ 11 \overline{) 6.0000} \\ \underline{-55} \\ 50 \\ \underline{-44} \\ 60 \\ \underline{-55} \\ 50 \end{array}$$

Part III: Fraction Operations – All answers in SIMPLEST FORM!

1) $26\frac{5}{6} + 45\frac{7}{9}$

$$\begin{array}{r} 26\frac{5}{6} = \frac{15}{18} \\ + 45\frac{7}{9} = \frac{14}{18} \\ \hline 71\frac{29}{18} \\ \swarrow \quad \searrow \\ 71 \quad 1\frac{11}{18} \\ \hline \boxed{72\frac{11}{18}} \end{array}$$

2) $13\frac{7}{12} + 29\frac{1}{4}$

$$\begin{array}{r} 13\frac{7}{12} = \frac{7}{12} \\ + 29\frac{1}{4} = \frac{3}{12} \\ \hline 42\frac{10}{12} = \boxed{42\frac{5}{6}} \end{array}$$

3) $20 - 5\frac{2}{9}$

$$\begin{array}{r} 20 \\ - 5\frac{2}{9} \rightarrow 19\frac{9}{9} \\ \hline - 5\frac{2}{9} \\ \hline \boxed{14\frac{7}{9}} \end{array}$$

4) $31\frac{4}{5} - 16\frac{3}{10}$

$$\begin{array}{r} 31\frac{4}{5} \rightarrow 31\frac{8}{10} \\ - 16\frac{3}{10} \\ \hline 15\frac{5}{10} = \boxed{15\frac{1}{2}} \end{array}$$

5) $42\frac{1}{4} - 32\frac{5}{6}$

$$\begin{array}{r} 42\frac{1}{4} \rightarrow 42\frac{3}{12} \rightarrow 41\frac{15}{12} \\ - 32\frac{5}{6} \rightarrow 32\frac{10}{12} \\ \hline - 32\frac{10}{12} \\ \hline \boxed{9\frac{5}{12}} \end{array}$$

6) $2\frac{5}{8} \times 2\frac{2}{7}$

$$= \frac{3}{8} \times \frac{16}{7} = \frac{6}{1} = \boxed{6}$$

$$7) 1\frac{3}{7} \div 4$$

$$\frac{10}{7} \div \frac{4}{1}$$

$$= \frac{\overset{5}{\cancel{10}}}{7} \times \frac{1}{\cancel{4}_2} = \boxed{\frac{5}{14}}$$

$$8) 2\frac{2}{3} \div 1\frac{1}{9}$$

$$= \frac{8}{3} \div \frac{10}{9}$$

$$= \frac{\overset{4}{\cancel{8}}}{3} \times \frac{\cancel{9}_3}{\cancel{10}_5} = \frac{12}{5} = \boxed{2\frac{2}{5}}$$