

Name _____

Date _____

Mr. Tallman

Math 7

Review for Quiz 3 - Number System and Fractions (Lessons 11 - 16)

Converting Fractions to Decimals - SHOW THE LONG DIVISION

<p>1) $-\frac{4}{25}$</p> $\begin{array}{r} 25 \overline{) 4.00} \\ \underline{-25} \\ 150 \\ \underline{-150} \\ 0 \end{array}$ <p style="text-align: center; font-size: 2em;">-0.16</p>	<p>2) $-\frac{13}{9}$</p> $\begin{array}{r} 9 \overline{) 13.00} \\ \underline{-9} \\ 40 \\ \underline{-36} \\ 40 \end{array}$ <p style="text-align: center; font-size: 2em;">-1.44</p>
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Converting Decimals to Fractions - Write answer in simplest form.

<p>3) -0.125</p> $\frac{-125}{1000} \div 25 = \frac{-5}{40} \div 5 = -\frac{1}{8}$ <p style="text-align: center; font-size: 2em;">-1/8</p>	<p>4) -2.32</p> $-2 \frac{32}{100} \div 4 = -2 \frac{8}{25}$ <p style="text-align: center; font-size: 2em;">-2 8/25</p>
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Multiply or Divide. Convert all answers to mixed numbers in simplest form.

<p>5) $-3\frac{5}{6} \cdot \frac{7}{6}$</p> $\frac{-23}{6} \cdot \frac{7}{6} = \frac{-23}{7} = -3\frac{2}{7}$ <p style="text-align: center; font-size: 2em;">-3 2/7</p>	<p>6) $-5\frac{3}{4} \div 1\frac{7}{8}$</p> $\frac{-23}{4} \div \frac{15}{8} = \frac{-23}{4} \cdot \frac{8}{15} = \frac{-46}{15} = -3\frac{1}{15}$ <p style="text-align: center; font-size: 2em;">-3 1/15</p>
<p>7) $-2\frac{1}{2} \div (-3\frac{1}{3})$</p> $\frac{-5}{2} \div \frac{-10}{3} = \frac{-5}{2} \cdot \frac{3}{-10} = \frac{15}{20} = \frac{3}{4}$ <p style="text-align: center; font-size: 2em;">3/4</p>	<p>8) $-6\frac{1}{5} \cdot (-2\frac{10}{11})$</p> $\frac{-31}{5} \cdot \frac{-32}{11} = \frac{992}{55} = 18\frac{9}{55}$ <p style="text-align: center; font-size: 2em;">18 9/55</p>

9) Dan needs $3\frac{1}{3}$ gallons of gas for his lawnmower. His gas container in his garage only contains $1\frac{1}{6}$ gallons of gas. How much does Dan need to purchase from the gas station to completely fill his lawnmower?

$\frac{60}{6} \quad 3\frac{1}{3} - 1\frac{1}{6} \rightarrow \frac{20}{6} - \frac{1}{6} = \frac{19}{6} = 2\frac{1}{6} \text{ gallons}$

$\frac{2 \times 10}{2 \times 3} - \frac{1}{6}$

Add or Subtract. Convert all answers to mixed numbers in simplest form.

<p>10) $\left(\frac{1}{4} \times \frac{2}{3}\right) + \left(-\frac{3}{4}\right) \times 3$ $\frac{LCD}{12}$</p> <p>$-\frac{8}{12} + \left(-\frac{9}{12}\right)$</p> <p>$-\frac{17}{12} = -1\frac{5}{12}$</p>	<p>11) $-4\frac{7}{8} - \left(-3\frac{5}{16}\right)$ $\frac{LCD}{16}$</p> <p>$2 \times \frac{39}{8} - \left(-\frac{53}{16}\right)$ $\rightarrow -\frac{78}{16} + \frac{53}{16}$</p> <p>$-\frac{78}{16} - \left(-\frac{53}{16}\right)$ $\rightarrow -\frac{25}{16} = -1\frac{9}{16}$</p>
<p>12) $\frac{15}{7} - \left(-\frac{5}{7}\right)$</p> <p>$\frac{15}{7} + \frac{5}{7} = \frac{20}{7} = 2\frac{6}{7}$</p>	<p>13) $-10\frac{2}{3} + 7\frac{1}{3}$</p> <p>$-\frac{32}{3} + \frac{22}{3} = -\frac{10}{3} = -3\frac{1}{3}$</p>

Number System - Circle your choice below.

<p>14) Which of the following is a rational number?</p> <p>A) 3.395832892...</p> <p>B) 2π</p> <p><input checked="" type="radio"/> C) $\sqrt{64} = 8$</p> <p>D) $2\frac{2}{3}$</p>	<p>15) Which of the following is an irrational number?</p> <p>A) -0.872</p> <p>B) $\sqrt{25}$</p> <p><input checked="" type="radio"/> C) $\frac{1}{5}$</p> <p>D) $\sqrt{13}$</p>
<p>16) Which number is an integer?</p> <p>A) -12.97</p> <p>B) $\frac{22}{7}$</p> <p>C) $\frac{1}{17}$</p> <p><input checked="" type="radio"/> D) -32</p>	<p>17) What is the only WHOLE NUMBER that is not a NATURAL NUMBER?</p> <p><u>zero</u></p>

18) The table below shows the depths of different types of coral relative to sea level. Which of the coral lives deeper under sea level than black coral? Explain.

Blue Coral. $-6\frac{1}{5}$ ft is deeper than $-5\frac{4}{5}$ ft.

Coral	Elevations (yds)
Sea Pen	$-\frac{12}{10}$
Black Coral	$-5\frac{4}{5}$
Blue Coral	$-6\frac{1}{5} = -\frac{31}{5}$

19) Rewrite the following numbers from least to greatest.

$$\cancel{-\frac{2}{3}}, \cancel{\frac{5}{9}}, \cancel{0.5}, \cancel{-1.3}, \cancel{-\frac{10}{3}}$$

$$-\frac{10}{3}, -1.3, -\frac{2}{3}, 0.5, \frac{5}{9}$$

20) The table below shows the statistics of a running back in a football game. How many total yards did he gain? SHOW ALL WORK.

Quarter	1	2	3	4	Total
Yards	$-7\frac{1}{2}$	25	$31\frac{1}{2}$	$-6\frac{1}{4}$?

$$-7\frac{1}{2} \downarrow -7\frac{2}{4}$$

$$31\frac{1}{2} \downarrow 31\frac{2}{4}$$

$$-7\frac{2}{4} + (-6\frac{1}{4}) = -13\frac{3}{4}$$

$$25 + 31\frac{2}{4} = 56\frac{2}{4}$$

$$56\frac{2}{4} + (-13\frac{3}{4}) = 42\frac{3}{4} \text{ yards gained}$$

21) Review. Show all work where possible.

A) $-8 + 4 = \underline{-4}$	B) $-36 \div 6 = \underline{-6}$	C) $-2 - (-7) = \underline{5}$ $-2 + 7$
D) $ -8(3) = \underline{24}$ $ -24 $	E) Solve for x. $\begin{array}{r} -9 + x = -12 \\ +9 \quad +9 \\ \hline x = -3 \end{array}$	F) Identify the property shown below. $8 \cdot (9 \cdot 3) = (8 \cdot 9) \cdot 3$ Associative Property

