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97%

DATE

$$\frac{3}{1} \times \frac{9}{2} = \frac{27}{2} = 13 \frac{1}{2}$$

MATHEMATICS - 7

12% DIRECTIONS: Write True before each true statement and False before each false statement.

- ① True ① $3 \times 4 \frac{1}{2}$ or $3 \times (4 + \frac{1}{2}) = (3 \times 4) + (3 \times \frac{1}{2})$ illustrates the distributive property of multiplication over addition.
- ② False ② $\frac{4}{8}; \frac{2}{4}; \frac{1}{2}$ are like fractions.
- ③ False ③ The set of odd numbers $\{1, 3, 5, 7, \dots\}$ is closed under addition.
- ④ ☒ True ④ $\frac{3}{8}; \frac{1}{4}; \frac{2}{3}; \frac{7}{5}$ name fractional numbers.

16% DIRECTIONS: Place between each pair of fractions the appropriate symbol ($<$; $=$; $>$) so that a true statement is formed. ($<$ less than) ($>$ greater than) ($=$ equals)

- ① $\frac{21}{30} (=) \frac{7}{10}$ $\frac{21}{30} = \frac{7 \times 3}{10 \times 3}$
- ② $\frac{7}{5} (>) \frac{42}{35}$ $\frac{7}{5} = \frac{42}{35}$
- ③ $\frac{68}{60} (<) \frac{4}{3}$ $\frac{68}{60} = \frac{17}{15}$
- ④ $\frac{75}{18} (=) \frac{25}{6}$ $\frac{75}{18} = \frac{25 \times 3}{6 \times 3}$

NOTE - Show your work in work area at the bottom of this page.

16% DIRECTIONS: Change the following mixed fractions to improper fractions. Please, show your work.

- ① $7 \frac{9}{16} = \frac{121}{16}$
- ② $2 \frac{3}{32} = \frac{67}{32}$
- ③ $1 \frac{16}{32} = \frac{48}{32}$
- ④ $2 \frac{5}{24} = \frac{53}{24}$

DIRECTIONS: Reduce the following fractions to lowest terms. Please, show your work.

- ① $\frac{180}{840} = \frac{3}{14}$
- ② $\frac{93}{310} = \frac{3}{10}$

WORK AREA

$$\frac{16}{112} = \frac{1}{7}$$

$$20 \overline{) 180}$$

$$20 \overline{) 42}$$

$$\frac{9}{42} = \frac{3}{14}$$

$$\frac{31}{62} = \frac{1}{2}$$

$$\frac{163}{310}$$

$$\frac{31}{10}$$

$$31 \times 2 \times 5$$

(18%)

DIRECTIONS: Change the following to mixed fractions in lowest or simplest form. Please show your work.

$$\textcircled{1} \quad \frac{98}{42} = 2\frac{1}{3}$$

$$\begin{array}{r} 1 \ 7 \ 14 \\ 3 \ 21 \ 42 \overline{) 98} \\ \underline{84} \\ 14 \end{array}$$

$$\textcircled{2} \quad \frac{26}{16} = 1\frac{5}{8}$$

$$\begin{array}{r} 5 \ 10 \ 1 \\ 8 \ 16 \overline{) 26} \\ \underline{16} \\ 10 \end{array}$$

$$\textcircled{3} \quad \frac{32}{21} = 1\frac{11}{21}$$

$$\begin{array}{r} 1 \ 21 \ 1 \\ 21 \overline{) 32} \\ \underline{21} \\ 11 \end{array}$$

$$\textcircled{4} \quad \frac{47}{32} = 1\frac{15}{32}$$

$$\begin{array}{r} 1 \ 32 \ 1 \\ 32 \overline{) 47} \\ \underline{32} \\ 15 \end{array}$$

$$\textcircled{5} \quad \frac{39}{18} = 2\frac{1}{6}$$

$$\begin{array}{r} 1 \ 3 \ 2 \\ 6 \ 18 \overline{) 39} \\ \underline{36} \\ 3 \end{array}$$

$$\textcircled{6} \quad \frac{43}{24} = 1\frac{19}{24}$$

$$\begin{array}{r} 1 \ 24 \ 1 \\ 24 \overline{) 43} \\ \underline{24} \\ 19 \end{array}$$

DIRECTIONS: Solve the following problems. Work to simplest form. Please show your work.

ADDITION

$$\textcircled{1} \quad 7\frac{5}{6} + 2\frac{1}{4} = 9\frac{11}{12}$$

$$\begin{array}{r} 1 \ 7 \ 5 \\ 6 \ 24 \overline{) 41} \\ \underline{42} \\ 1 \end{array}$$

$$\textcircled{2} \quad 4\frac{1}{5} + 2\frac{3}{4} = 6\frac{7}{20}$$

$$\begin{array}{r} 1 \ 4 \ 1 \\ 5 \ 20 \overline{) 25} \\ \underline{20} \\ 5 \end{array}$$

SUBTRACTION

$$\textcircled{1} \quad 3\frac{15}{40} - 4\frac{32}{40} = -1\frac{17}{40}$$

$$\begin{array}{r} 1 \ 3 \ 15 \\ 40 \overline{) 55} \\ \underline{40} \\ 15 \end{array}$$

$$\textcircled{2} \quad 6\frac{2}{8} - 2\frac{5}{8} = 4\frac{5}{8}$$

$$\begin{array}{r} 1 \ 6 \ 2 \\ 8 \ 40 \overline{) 22} \\ \underline{16} \\ 6 \end{array}$$

MULTIPLICATION

$$\textcircled{1} \quad \frac{2}{5} \times \frac{3}{5} = \frac{6}{25}$$

$$\textcircled{2} \quad 3\frac{1}{7} \times 10\frac{1}{2} = 33\frac{1}{2}$$

$$\begin{array}{r} 11 \ 12 \ 1 \\ 7 \ 49 \overline{) 73} \\ \underline{49} \\ 24 \end{array}$$

$$\textcircled{3} \quad 3\frac{1}{8} \times 1\frac{1}{2} = 3\frac{3}{4}$$

$$\begin{array}{r} 25 \ 1 \\ 8 \ 40 \overline{) 25} \\ \underline{24} \\ 1 \end{array}$$

$$\textcircled{4} \quad 120 \times 2\frac{1}{4} \times \frac{3}{5} = 180$$

$$\begin{array}{r} 18 \ 10 \\ 180 \overline{) 180} \\ \underline{180} \\ 0 \end{array}$$