

L41-45 Test Review

L41: Using Formulas

$A = lw$, find A when l is 4
and w is 7cm

$$A = 4(7) \\ = 28\text{cm}^2$$

$$ab + c \div a$$

$$\text{if } a = 2$$

$$b = 12$$

$$c = 18$$

$$(2)(12) + 18 \div 2$$

$$24 + 18 \div 2$$

$$24 + 9$$

$$\textcircled{33}$$

L41: Distributive Property

$$a(b+c) = ab + ac$$

$$a(b-c) = ab - ac$$

$$2(3+n) + 4$$

$$6 + 2n + 4$$

$$2n + 10$$

$$3(7 - q) = 21 - 3q$$

L42: Repeating Decimals

$3 \div 8$

0.777

$9 \overline{) 7.0000}$

$\begin{array}{r} 7.0000 \\ -63 \\ \hline 70 \\ -63 \\ \hline 70 \\ -63 \\ \hline 70 \\ -63 \\ \hline 70 \end{array}$

$8 \overline{) 3.0000}$

0.375

$\begin{array}{r} 3.0000 \\ -24 \\ \hline 60 \\ -56 \\ \hline 40 \\ -40 \\ \hline 0 \end{array}$

$0.\overline{7}$

$\begin{array}{r} 0.7 \\ \hline 0.7 \\ \hline 0.7 \\ \hline 0.7 \end{array}$

$.8191919\dots = .8\overline{19}$

Round $.3\overline{45}$ to 8 decimal places...

$.345454545$
 $.34545455$

$.3$ $.3\overline{}$ $.333$

least to greatest ... $.3$, $.333$, $\frac{1}{3}$

$.3000$
 $.3333$
 $.3330$

L43: Decimal \rightarrow Fraction

Place value, simplify

$1.\underline{8}$ $1\frac{8}{10} = \left(\frac{4}{5}\right)$

$.52$
 $\hookrightarrow \frac{52}{100} \div 2$
 $\frac{26}{50} \div 2$
 $\frac{13}{25}$

L43: Fraction \rightarrow Decimal

$$\frac{n}{d} = \underline{n \div d} = d \overline{)n}$$

$\frac{4}{5}$ $5 \overline{)4.0}$ $\frac{8}{10} \rightarrow \frac{4}{5}$

$\quad \quad \quad \underline{.40}$

$\quad \quad \quad \underline{\quad}$

$\frac{2}{3} \rightarrow$ decimal

$$\begin{array}{r} 0.66 \\ 3 \overline{) 2.00} \\ \underline{-18} \\ 20 \\ \underline{-18} \\ 2 \end{array} = 0.\overline{6}$$

$1\frac{3}{8} \rightarrow$ improper $\rightarrow \div$

$\rightarrow \div$ fraction, carry over whole #

$$\begin{array}{r} 0.375 \\ 8 \overline{) 3.000} \\ \underline{24} \\ 60 \\ \underline{56} \\ 40 \\ \underline{40} \\ 0 \end{array}$$

$$= 1.375$$

$$\begin{array}{r} 1.375 \\ \frac{11}{8} \overline{) 11.000} \\ \underline{8} \\ 30 \\ \underline{24} \\ 60 \\ \underline{56} \\ 40 \\ \underline{40} \\ 0 \end{array}$$

L43: % \rightarrow Decimal

percent \rightarrow out of 100

$$\frac{\%}{100} \rightarrow \% \div 100$$

$$86.4\% \div 100$$

move
decimal
2x left

$$0.864$$

$$36.705\% \div 100$$

$$.36705$$

$$227\% \div 100$$

$$2.27$$

Deci \rightarrow Fraction

$\frac{\text{Deci \#}}{\text{place value}}$, simplify

fraction \rightarrow decimal

$\frac{n}{d} \rightarrow d \sqrt{n}$
∴ \rightarrow decimal
∴ $\div 100$

L44: Division Answers

$$27 \div 4$$

Remainder

$$\begin{array}{r} 6R3 \\ 4 \overline{) 27} \\ \underline{24} \\ 3 \end{array}$$

Decimal

$$\begin{array}{r} 6.75 \\ 4 \overline{) 27.00} \\ \underline{24} \\ 30 \\ \underline{28} \\ 20 \\ \underline{20} \\ 0 \end{array}$$

Mixed #

$$\begin{array}{r} 6\frac{3}{4} \\ 4 \overline{) 27} \\ \underline{24} \\ 3 \end{array}$$

Class of 27 go on field trip.
Take vans that hold 8 students.
How many vans do they need to take
all 27 students?

$$3R3, 3\frac{3}{8}, 3.375$$
$$8 \overline{) 27} \\ \underline{24} \\ 3$$

4 vans

L45: Divide by a decimal

$$\underline{40} \overline{) 1.60} \\ \underline{40} \\ 160 \\ \underline{160} \\ 00 \\ \underline{00} \\ 00$$