



ELEMENTARY ALGEBRA

CHAPTER 1

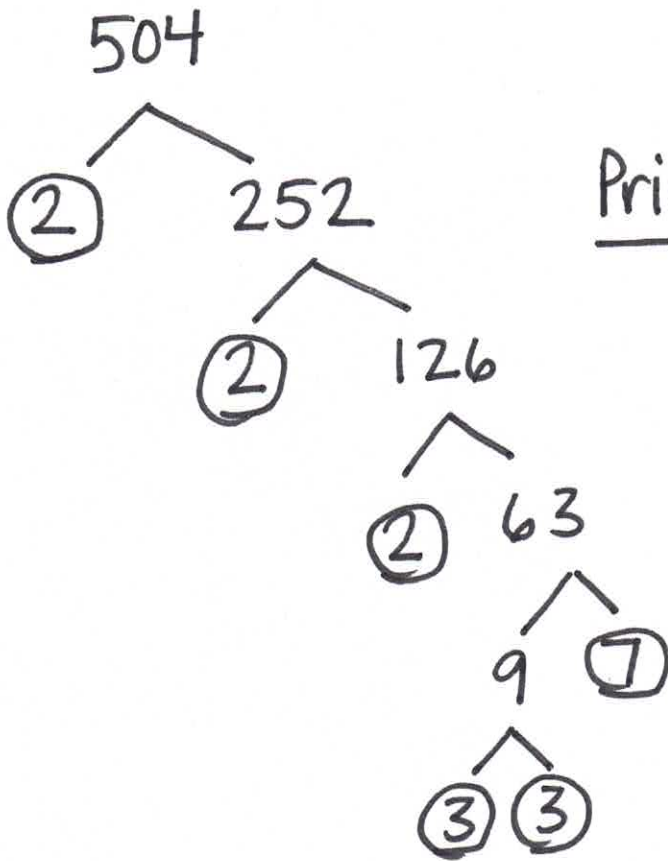
Practice Test Answer Key

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(1311.) 205,617

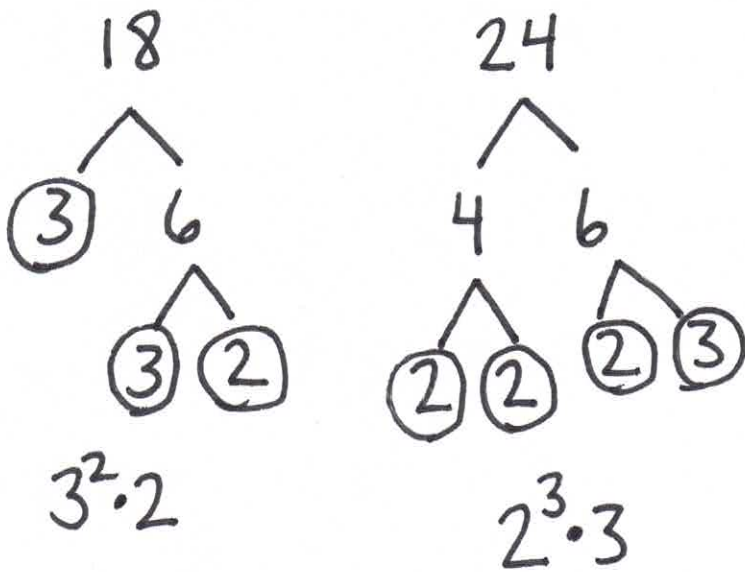
(1312.)



Prime Factorization:

$$2^3 \cdot 3^2 \cdot 7$$

(1313.)




$$3^2 \cdot 2$$


$$2^3 \cdot 3$$

LCM:

$$\begin{aligned}
 &2^3 \cdot 3^2 \\
 &= 8 \cdot 9 \\
 &= \boxed{72}
 \end{aligned}$$

$$\textcircled{1314.} \quad \textcircled{5n} + \underline{\underline{8}} + \textcircled{2n} - \underline{\underline{1}}$$
$$= \boxed{7n + 7}$$

$$\textcircled{1315.} \quad -|x| \quad \text{when } x = \textcircled{-2}$$

$$= -|-2|$$
$$= -(2)$$
$$= \boxed{-2}$$

$$\textcircled{1316.} \quad 11 - a \quad \text{when } a = \textcircled{-3}$$

$$= 11 - (-3)$$
$$= 11 + 3$$
$$= \boxed{14}$$

$$\textcircled{1317.} \quad -7 - 20$$
$$= \boxed{-27}$$

(1318.) $-\$18 + \152
 $= \boxed{\$134}$

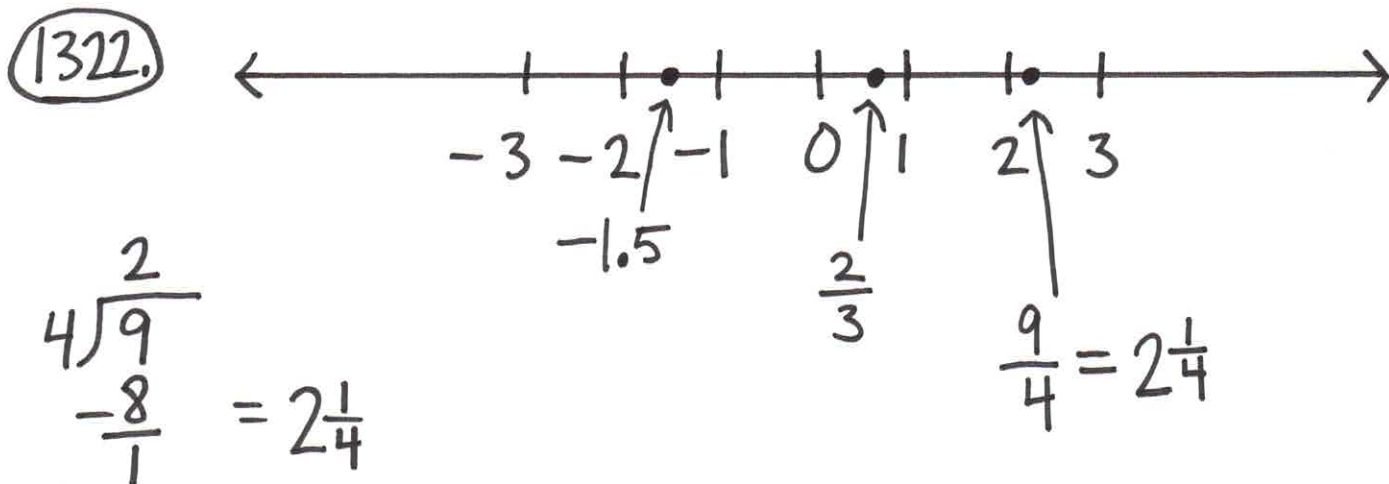
$$\begin{array}{r} 152 \\ - 18 \\ \hline 134 \end{array}$$

(1319.) $677.\overset{\downarrow}{1}348$
 $= \boxed{677.13}$

(1320.) $\frac{4}{5} = \boxed{0.8}$

$$\begin{array}{r} .8 \\ 5 \overline{) 4.000} \\ - 40 \\ \hline 0 \end{array}$$

(1321.) $1.85 \rightarrow = \boxed{185\%}$



$$\begin{aligned} \textcircled{1323.} \quad & 4 + 10(3+9) - 5^2 \\ & = 4 + 10(12) - 25 \\ & = 4 + 120 - 25 \\ & = 124 - 25 \\ & = \boxed{99} \end{aligned}$$

$$\begin{aligned} \textcircled{1324.} \quad & -85 + 42 \\ & = \boxed{-43} \end{aligned}$$

$$\begin{array}{r} 85 \\ -42 \\ \hline 43 \end{array}$$

$$\begin{aligned} \textcircled{1325.} \quad & -19 - 25 \\ & = \boxed{-44} \end{aligned}$$

$$\begin{array}{r} 25 \\ +19 \\ \hline 44 \end{array}$$

$$\begin{aligned} \textcircled{1326.} \quad & (-2)^4 = (-2)(-2)(-2)(-2) \\ & = \boxed{16} \end{aligned}$$

(1327.) $-5(-9) \div 15$
 $= 45 \div 15$
 $= \boxed{3}$

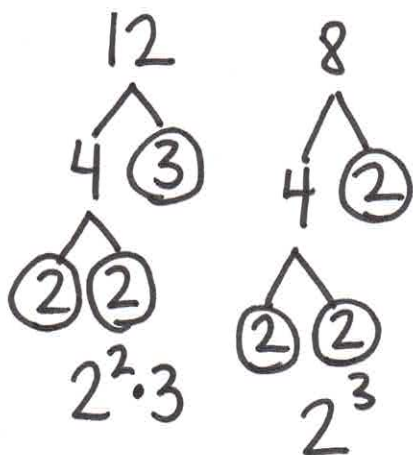
(1328.) $\frac{3}{8} \cdot \frac{11}{12} = \frac{\cancel{3} \cdot 11}{8 \cdot \cancel{12}_4} = \boxed{\frac{11}{32}}$

(1329.) $\frac{4}{5} \div \frac{9}{20} = \frac{4}{5} \cdot \frac{20}{9}$
 $= \frac{4 \cdot \cancel{20}_4}{\cancel{5}_1 \cdot 9}$
 $= \boxed{\frac{16}{9}}$

(1330.) $\frac{12+3 \cdot 5}{15-6} = \frac{12+15}{9} = \frac{27}{9} = \boxed{3}$

(1331.) $\frac{m}{7} + \frac{10}{7} = \boxed{\frac{m+10}{7}}$

(1332.) $\frac{7}{12} - \frac{3}{8} = \frac{7 \cdot \frac{2}{2}}{12 \cdot 2} - \frac{3 \cdot \frac{3}{3}}{8 \cdot 3}$



$= \frac{14}{24} - \frac{9}{24}$

$= \frac{14-9}{24}$

$= \boxed{\frac{5}{24}}$

LCD : $2^3 \cdot 3$
 $= 8 \cdot 3$
 $= 24$

(1333.) $-5.8 + (-4.7)$
 $= \boxed{-10.5}$

$\begin{array}{r} 5.8 \\ +4.7 \\ \hline 10.5 \end{array}$

$$(1334.) \quad 100 - 64.25$$

$$= \boxed{35.75}$$

$$\begin{array}{r} \cancel{100}^9 \cancel{0}^9 \cancel{0}^9 \cancel{0}^{10} \\ - 64.25 \\ \hline 35.75 \end{array}$$

(p.7)

$$(1335.) \quad (0.07)(31.95)$$

$$= \boxed{2.2365}$$

$$\begin{array}{r} 31.95 \\ \times 0.07 \\ \hline 22365. \end{array}$$

} 4 numbers behind the decimal point

$$(1336.) \quad 9 \div 0.05$$

$$= \boxed{180}$$

$$\begin{array}{r} .05 \overline{) 9.00} \\ \underline{180} \\ 5 \overline{) 900} \\ \underline{-5} \\ 40 \\ \underline{-40} \\ 00 \\ \underline{-0} \\ 0 \end{array}$$

$$(1337.) \quad -14 \left(\frac{5}{7} p \right)$$

$$= \frac{-\cancel{14}^2 \cdot 5 p}{\cancel{7}_1} = -\frac{10 p}{1} = \boxed{-10 p}$$

$$\begin{aligned} \textcircled{1338.} \quad & (u+8)-9 \\ & = u+8-9 \\ & = \boxed{u-1} \end{aligned}$$

$$\begin{aligned} \textcircled{1339.} \quad & \underline{6x} + (-\underline{4y}) + \underline{9x} + \underline{8y} \\ & = \boxed{15x+4y} \end{aligned}$$

$$\textcircled{1340.} \quad \frac{0}{23} = \boxed{0}$$

$$\textcircled{1341.} \quad \frac{75}{0} = \boxed{\text{undefined}}$$

$$\begin{aligned} \textcircled{1342.} \quad & -2 \overbrace{(13q-5)}^{\curvearrowright} \\ & = \boxed{-26q+10} \end{aligned}$$

(1343.) $1\frac{2}{3}$ hours

p.9

$$= \frac{5}{3} \text{ hours}$$

$$= \left(\frac{5 \text{ hours}}{3}\right) \left(\frac{60 \text{ min.}}{1 \text{ hour}}\right)$$

$$= \frac{300 \text{ min.}}{3}$$

$$= \boxed{100 \text{ min.}}$$

(1344.) 5 ft. 11 in. + 1 ft. 6 in.

$$\begin{array}{r} 5 \text{ ft.} \\ + 1 \text{ ft.} \\ \hline 6 \text{ ft.} \end{array} + \begin{array}{r} 11 \text{ in.} \\ + 6 \text{ in.} \\ \hline 17 \text{ in.} \\ \hline (17 \text{ in.}) \end{array} \left(\frac{1 \text{ ft.}}{12 \text{ in.}}\right)$$

$$= 6 \text{ ft.} + \frac{17}{12} \text{ ft.}$$

$$= 6 \text{ ft.} + 1\frac{5}{12} \text{ ft.}$$

$$= \boxed{7\frac{5}{12} \text{ ft.}} \text{ or } \boxed{7.42 \text{ ft.}}$$

$$(1345.) (2.8 \text{ mi.}) \left(\frac{1.61 \text{ km}}{1 \text{ mi.}} \right)$$

$$= \boxed{4.508 \text{ km}}$$