

HW: Worksheet

**Warm up:**

A water tank holds 30 gallons when it is full. A hole in the tank is causing it to leak  $\frac{3}{4}$  gallon every hour. If no one notices the leak, how long will it take for the tank to be empty?

$$\frac{30}{1} \div \frac{3}{4} = \frac{\cancel{30}^{\cancel{10}}}{1} \cdot \frac{4}{\cancel{3}_1} = 40h$$

A wood board is  $19\frac{1}{4}$  in long. How long would the board be if you cut off  $3\frac{11}{16}$  in?

$$\begin{array}{r} 77 \\ \times 4 \\ \hline 308 \\ \hline \end{array}$$

$$19\frac{1}{4} - 3\frac{11}{16}$$

$$\frac{77}{4} - \frac{59}{16}$$

$$\frac{308}{16} - \frac{59}{16} = \frac{249}{16}$$

$$\begin{array}{r} 15 \\ 16 \overline{) 249} \\ \underline{-16} \phantom{0} \\ 89 \\ \underline{-80} \\ 9 \end{array}$$

$$15\frac{9}{16} \text{ in}$$

Jen's rectangular pool is  $10\frac{1}{2}$  ft wide and  $19\frac{7}{8}$  ft long. What is the area of the pool?

$$\begin{array}{r} 159 \\ \times 21 \\ \hline 3180 \\ 1590 \\ \hline 3339 \end{array}$$

$$\frac{21}{2} \cdot \frac{159}{8} = \frac{3339}{16} = 208\frac{11}{16} \text{ ft}^2$$

$$\begin{array}{r} 208 \\ 16 \overline{) 3339} \\ \underline{-320} \phantom{0} \\ 139 \\ \underline{-128} \\ 11 \end{array}$$

$$\begin{array}{r} 16 \\ \times 5 \\ \hline 80 \end{array}$$

$$\begin{array}{r} 16 \\ \times 8 \\ \hline 128 \end{array}$$

# Practice

①

$$6\frac{1}{2} \div 5$$

$$\frac{13}{2} \div 5$$

$$\frac{13}{2} \cdot \frac{1}{5} = \frac{13}{10} = 1\frac{3}{10} \text{ ft}$$

②

$$12\frac{3}{5} \cdot 7$$

$$\frac{63}{5} \cdot \frac{7}{1} = \frac{441}{5} = 88\frac{1}{5} \text{ ft}^3$$

③

$$7\frac{1}{4} - 5\frac{3}{10}$$

$$\frac{29}{4} - \frac{53}{10}$$

$$\frac{145}{20} - \frac{106}{20} = \frac{39}{20} = 1\frac{19}{20} \text{ mi}$$

④

$$10\frac{1}{4} \div 3$$

$$\frac{41}{4} \cdot \frac{1}{3} = \frac{41}{12} = 3\frac{5}{12} \text{ in}$$



⑤

$$6\frac{5}{8} + 8\frac{3}{16}$$

$$\frac{53}{8} + \frac{131}{16}$$

$$\frac{106}{16} + \frac{131}{16} =$$

$$\frac{237}{16} =$$

$$14\frac{13}{16} \text{ in}$$

$$\begin{array}{r} 14 \\ 16 \overline{) 237} \\ \underline{-16} \phantom{0} \\ 77 \\ \underline{-64} \\ 13 \end{array}$$

⑥

$$2\frac{3}{4} \cdot 2\frac{3}{4}$$

$$\begin{array}{r} 416 \\ \times 112 \\ \hline \end{array}$$

$$\frac{11}{4} \cdot \frac{11}{4} = \frac{121}{16}$$

$$= 7\frac{9}{16} \downarrow +^2$$

⑤

$$12\frac{1}{4} - 5\frac{7}{16}$$

$$\frac{49}{4} - \frac{87}{16}$$

$$\frac{196}{16} - \frac{87}{16} = \frac{109}{16} = 6\frac{13}{16} \text{ in}$$

$$\begin{array}{r} 3 \ 16 \\ \times 4 \\ \hline 94 \end{array}$$

