

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?

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

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?

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

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

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

$$\frac{249}{16} = 15\frac{9}{16} \text{ in}$$

$$\begin{array}{r} 319 \\ \times 4 \\ \hline 76 \end{array}$$

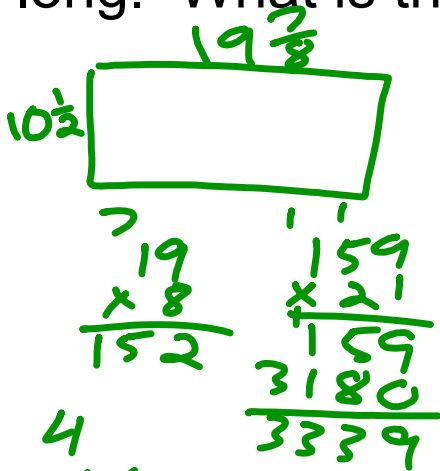
$$\begin{array}{r} 277 \\ \times 4 \\ \hline 308 \end{array}$$

$$\begin{array}{r} 16 \\ \times 3 \\ \hline 48 \end{array}$$

$$\begin{array}{r} 2918 \\ - 59 \\ \hline 249 \end{array}$$

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

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?



$$10\frac{1}{2} \cdot 19\frac{7}{8}$$

$$\frac{21}{2} \cdot \frac{159}{8}$$

$$\frac{3339}{16} = 208\frac{11}{16} \text{ ft}^2$$

$$\begin{array}{r} 208 \\ 16 \overline{) 3339} \\ \underline{-3200} \\ 139 \\ \underline{-128} \\ 11 \end{array}$$

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

$$12\frac{3}{5} \cdot 7$$
$$\frac{63}{5} \cdot \frac{7}{1} = \frac{441}{5} = 88\frac{1}{5} \text{ ft}^3$$

$$\begin{array}{r} 3 \\ 4 \overline{) 29} \\ \underline{\times 5} \\ 145 \end{array}$$

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

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

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

④

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

$$\frac{41}{4} \cdot \frac{1}{3}$$

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

⑤

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

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

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

$$\frac{237}{16} = 14\frac{13}{16} \text{ in}$$

$$\begin{array}{r} 4\frac{16}{8} \\ \times 8 \\ \hline 128 \end{array}$$

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

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

