

7th Grade Lesson 45

- I can divide by a decimal number.

Dan has \$2.00 and wants to buy flavored icicles for his friends. If flavored icicles cost \$0.25 each, how many can Dan buy?

$$\frac{\$2.00}{\$0.25} \cdot \frac{100}{100} = \frac{200}{25}$$

$$\frac{200¢}{25¢}$$

$$\begin{array}{r} 8 \\ 25¢ \overline{) 200¢} \\ \underline{200} \\ 0 \end{array}$$

We can form equivalent division problems by multiplying or dividing the dividend and divisor by the same number. We use this method to change "division by a decimal" problems to "**division by a whole number**" problems.

$$\frac{1.36}{0.4} \cdot \frac{10}{10}$$

$$\frac{1.36}{0.4} \times \frac{10}{10} = \frac{13.6}{4}$$

$$0.4 \overline{) 1.36}$$

$$4 \overline{) 13.6}$$

Divide: $3.36 \div 0.06$

$$\begin{array}{r} 56. \\ 0.06 \overline{) 3.36} \\ \underline{-30} \\ 36 \\ \underline{-36} \\ 0 \end{array}$$

$$(56)$$

$0.144 \div 0.8$

$$\begin{array}{r} 0.18 \\ 0.8 \overline{) 0.144} \\ \underline{-8} \\ 64 \\ \underline{-64} \\ 0 \end{array}$$

$$(0.18)$$

Divide:

$15.4 \div 0.07$

$$\begin{array}{r} 220 \\ 0.07 \overline{) 1540.} \\ \underline{14} \\ 14 \\ \underline{14} \\ 00 \\ \underline{0} \end{array}$$

$21 \div 0.5$

$$\begin{array}{r} 42 \\ 5 \overline{) 210} \\ \underline{20} \\ 10 \\ \underline{10} \\ 0 \end{array}$$

$1.54 \div 0.8$

$$\begin{array}{r} 1.925 \\ 0.8 \overline{) 1540} \\ \underline{8} \\ 74 \\ \underline{72} \\ 20 \\ \underline{16} \\ 40 \\ \underline{40} \\ 0 \end{array}$$

(1.925)

How many \$0.35 erasers can be purchased with \$7.00?

$$\begin{array}{r} 20. \\ 0.35 \overline{) 7.00} \\ \underline{70} \\ 00 \end{array}$$

Assignment:

Problem Set 45 due Friday;
Test #8 Tomorrow

*A/B Optional Assignment: #9, 13, 24, & 25