

$$1 \overline{)13}$$

$$\begin{array}{r} 42 \overline{)782} \\ \underline{-42} \phantom{0} \\ 298 \\ \underline{-294} \\ 0042 \\ \underline{-42} \\ 0 \end{array}$$

5 steps

$$\begin{array}{r} 65 \overline{)9815} \\ \underline{-65} \phantom{0} \\ 331 \\ \underline{-325} \\ 0065 \\ \underline{-65} \\ 0 \end{array}$$
$$\begin{array}{r} 2 \\ 65 \\ \times 5 \\ \hline 325 \end{array}$$

① Ask - how many times can divisor go into dividend without going over.

② Multiply - multiply the # on top by the divisor

③ Subtract - subtract those 2 numbers

④ Bring down - Bring down the next single digit down from the division box

⑤ Repeat steps

check

$$\begin{array}{r} 32 \\ 65 \\ \times 151 \\ \hline 755 \\ 9060 \\ \hline 9815 \checkmark \end{array}$$

### 9.3: What's the Quotient?

1. Find the quotient of  $1,332 \div 9$  using one of the methods you have seen so far. Show your reasoning.

$$\begin{array}{r}
 148 \\
 9 \overline{) 1332} \\
 \underline{-9} \phantom{0} \phantom{0} \phantom{0} \\
 43 \phantom{0} \phantom{0} \\
 \underline{-36} \phantom{0} \\
 72 \\
 \underline{-72} \\
 0
 \end{array}$$

2. Find each quotient and show your reasoning. Use the partial quotients method at least once.

a.  $1,115 \div 5$

$$\begin{array}{r}
 223 \\
 5 \overline{) 1115} \\
 \underline{-10} \phantom{0} \phantom{0} \\
 11 \phantom{0} \\
 \underline{-10} \phantom{0} \\
 15 \\
 \underline{-15} \\
 0
 \end{array}$$

b.  $665 \div 7$

$$\begin{array}{r}
 95 \\
 7 \overline{) 665} \\
 \underline{-63} \phantom{0} \\
 35 \\
 \underline{-35} \\
 0
 \end{array}$$

c.  $432 \div 16$

$$\begin{array}{r}
 27 \\
 16 \overline{) 432} \\
 \underline{32} \phantom{0} \\
 112 \\
 \underline{-112} \\
 0
 \end{array}$$

2. Lin's method is called **long division**. Use this method to find the following quotients. Check your answer by multiplying it by the divisor.

a.  $846 \div 3$

$$\begin{array}{r} 282 \\ 3 \overline{) 846} \\ \underline{-6} \phantom{0} \\ 24 \phantom{0} \\ \underline{-24} \phantom{0} \\ 06 \\ \underline{-6} \\ 0 \end{array}$$

b.  $1,816 \div 4$

$$\begin{array}{r} 454 \\ 4 \overline{) 1816} \\ \underline{-16} \phantom{0} \\ 21 \phantom{0} \\ \underline{-20} \phantom{0} \\ 16 \\ \underline{-16} \\ 0 \end{array}$$

c.  $768 \div 12$

$$\begin{array}{r} 64 \\ 12 \overline{) 768} \\ \underline{-72} \phantom{0} \\ 48 \\ \underline{-48} \\ 0 \end{array}$$

### 10.3: Dividing Whole Numbers

1. Find each quotient.

a.  $633 \div 3$

b.  $1001 \div 7$

2. Here is Priya's calculation of  $906 \div 3$ .

$$\begin{array}{r} 320 \\ 3 \overline{) 906} \\ \underline{-9} \phantom{0} \\ 06 \\ \underline{-6} \\ 0 \end{array}$$

a. Priya wrote 320 for the value of  $906 \div 3$ . Check her answer by multiplying it by 3. What product do you get and what does it tell you about Priya's answer?

b. Describe Priya's mistake, then show the correct calculation and answer.