

G5-M2-Lesson 23

1. Divide. Then check using multiplication.

a. $4,753 \div 22$

I look at the dividend of 4,753 and estimate. $40 \text{ hundreds} \div 20 = 2 \text{ hundreds}$, or $4,000 \div 20 = 200$. I record 2 in the hundreds place. There's a remainder of 3 hundreds.

$$\begin{array}{r} 2 \\ 22 \overline{) 4,753} \\ \underline{- 44} \\ 3 \end{array}$$

I look at 35 tens and estimate $20 \text{ tens} \div 20 = 1 \text{ ten}$, or $200 \div 20 = 10$. I record 1 in the tens place. There's a remainder of 13 tens.

$$\begin{array}{r} 21 \\ 22 \overline{) 4,753} \\ \underline{- 44} \\ 35 \\ \underline{- 22} \\ 13 \end{array}$$

I look at 133 ones and estimate $120 \text{ ones} \div 20 = 6 \text{ ones}$, or $120 \div 20 = 6$. I record 6 in the ones place. There's a remainder of 1 one.

$$\begin{array}{r} 216 \text{ R}1 \\ 22 \overline{) 4,753} \\ \underline{- 44} \\ 35 \\ \underline{- 22} \\ 133 \\ \underline{- 132} \\ 1 \end{array}$$

I check my answer by multiplying the quotient and the divisor, 216×22 , and then add the remainder of 1.

Check:

$$\begin{array}{r} 216 \\ \times 22 \\ \hline 432 \\ + 4320 \\ \hline 4752 \end{array}$$

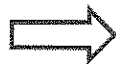
$$\begin{array}{r} 4,752 \\ + 1 \\ \hline 4,753 \end{array}$$

After checking, I get 4,753, which does match the original dividend. So I know I solved it correctly.

I look at the dividend of 3,795 and estimate $360 \text{ tens} \div 60 = 6 \text{ tens}$, or $3600 \div 60 = 60$. I record 6 in the tens place. There's a remainder of 7 tens.

b. $3,795 \div 62$

$$\begin{array}{r} 6 \\ 62 \overline{) 3,795} \\ \underline{- 3,72} \\ 7 \end{array}$$



$$\begin{array}{r} 61 \text{ R } 13 \\ 62 \overline{) 3,795} \\ \underline{- 3,72} \\ 75 \\ \underline{- 62} \\ 13 \end{array}$$

I look at 75 and estimate $60 \text{ ones} \div 60 = 1 \text{ one}$, or $60 \div 60 = 1$. I record 1 in the ones place. The quotient is 61 with a remainder of 13.

Check:

I check my answer by first multiplying the quotient and the divisor, and then I add the remainder.

$$\begin{array}{r} 61 \\ \times 62 \\ \hline 122 \\ + 3660 \\ \hline 3,782 \end{array}$$

$$\begin{array}{r} 3,782 \\ + 13 \\ \hline 3,795 \end{array}$$

2. 1,292 balloons were shared equally among 38 students. How many balloons did each student receive?

I use division, $1,292 \div 38$, to find how many balloons each student receives.

$$\begin{array}{r} 34 \\ 38 \overline{) 1,292} \\ \underline{- 1,14} \\ 152 \\ \underline{- 152} \\ 0 \end{array}$$

Each student received 34 balloons with 0 balloons left over.

Each student received 34 balloons.