

Long Division with Multi-Digit Divisors

Grade 6 math · Worksheet · Standards: 6.NS.B.2

Name: _____ Date: _____ Class: _____

These 20 problems build skill with the standard long division algorithm: two- and three-digit divisors, zeros in the quotient, estimating, remainders, and checking with multiplication.

The last six problems are multi-step word problems about shipping, travel and seating. They train standard 6.NS.B.2.

Standards: 6.NS.B.2 · **Level:** Grade 6

Problem 1 Naming the Parts (easy)

In $456 \div 12 = 38$, name the dividend, the divisor and the quotient. Then use multiplication to check the result.

Problem 2 Estimating Quotients (easy)

Use compatible numbers to estimate. (a) $612 \div 29$ (b) $4,185 \div 52$

Problem 3 Two-Digit Divisor (easy)

Divide: $988 \div 19$.

Problem 4 Another Two-Digit Divisor (easy)

Divide: $1,134 \div 18$.

Problem 5 Missing Digits (easy)

Find each ? in the long division of $756 \div 14$.

$$\begin{array}{r}
 14 \overline{) 756} \\
 \underline{7 } \\
 ?6 \\
 \underline{56} \\
 0
 \end{array}$$

Three digits are missing.

Problem 6 Quotient with Remainder (medium)

Divide $875 \div 26$. Write the quotient and remainder, then check.

Problem 7 Three-Digit Quotient (medium)

Divide: $9,282 \div 34$.

Problem 8 Zero in the Quotient (medium)

Divide: $6,327 \div 21$.

Problem 9 Three-Digit Divisor (medium)

Divide: $14,688 \div 144$.

Problem 10 Three-Digit Divisor with Remainder (medium)

Divide $52,300 \div 175$. Write the quotient and remainder.

Problem 11 Check the Claim (medium)

Sam says $3,150 \div 45 = 60$. Use multiplication to test his claim. If it is wrong, find the correct quotient.

Problem 12 Estimate and Divide (medium)

The picture shows an estimate for $2,415 \div 35$. Find the exact quotient and say how close the estimate is.

$$2,415 \div 35$$

$$2,450 \div 35 = 70$$

Compatible numbers.

Problem 13 Buses for a Field Trip (medium)

A school has 250 students going on a field trip. Each bus holds 48 students, and the picture shows how the students fill the buses. How many buses are needed?



Students per bus.

Problem 14 Packs of Pencils (medium)

A store has 350 pencils and sells them in packs of 12. How many full packs can be made, and how many pencils are left?

Problem 15 Cutting a Rope (hard)

A rope is 275 feet long and is cut into pieces of 12 feet, as in the picture. (a) How many full pieces are there? (b) Write the answer as a mixed number.



275 feet in all

The short end is 11 feet.

Problem 16 Classroom Markers (hard)

A school orders 36 boxes of markers with 24 markers in each box. The markers are shared equally among 32 classrooms. How many markers does each classroom get?

Problem 17 Cookie Cartons (hard)

A bakery packs 4,500 cookies into boxes of 18. Then the boxes go into cartons that hold 12 boxes each. How many cartons are needed?

Problem 18 Road Trip Days (hard)

A family drives 1,596 miles at a steady 57 miles per hour. (a) How many hours of driving is that? (b) If they drive 8 hours a day, how many days does the trip take?

Problem 19 Team Fundraiser (hard)

A club raised \$3,468 and splits it equally among 17 teams. Each team buys T-shirts that cost \$12 each. How many shirts can each team buy?

Problem 20 Concert Rows (hard)

A theater has rows of 38 seats. 2,150 guests come to a concert. (a) How many rows are needed? (b) How many seats are empty in the last row?