

9. [Large Number ÷]

Skill 9.1 Dividing a large number by a single digit, without carry over.

MM5 11 22 33 44
MM6 11 22 33 44

- Divide from left to right across the digits, one at a time.

Q.

$$\begin{array}{r} \square \\ 2 \overline{) 486} \end{array}$$

A.

$$\begin{array}{r} \boxed{243} \\ 2 \overline{) 486} \end{array}$$

hundreds first!

hundreds
tens
units

Hundreds:

$4 \div 2 = 2$

\Rightarrow 2 hundreds

Tens:

$8 \div 2 = 4$

\Rightarrow 4 tens

Units:

$6 \div 2 = 3$

\Rightarrow 3 units

Read as: 486 divided by 2 equals?
OR How many 2's go into 486?
OR 486 divides by 2 how many times?

Consider: $486 \div 2 = 243$
 $2 \times 243 = 486$

a)

$$\begin{array}{r} \boxed{200} \\ 3 \overline{) 600} \end{array}$$

hundreds first!

b)

$$\begin{array}{r} \square \\ 2 \overline{) 800} \end{array}$$

c)

$$\begin{array}{r} \square \\ 3 \overline{) 900} \end{array}$$

d)

$$\begin{array}{r} \square \\ 7 \overline{) 770} \end{array}$$

e)

$$\begin{array}{r} \square \\ 4 \overline{) 408} \end{array}$$

f)

$$\begin{array}{r} \square \\ 3 \overline{) 306} \end{array}$$

g)

$$\begin{array}{r} \square \\ 2 \overline{) 284} \end{array}$$

h)

$$\begin{array}{r} \square \\ 3 \overline{) 369} \end{array}$$

i)

$$\begin{array}{r} \square \\ 3 \overline{) 6000} \end{array}$$

thousands first!

j)

$$\begin{array}{r} \square \\ 2 \overline{) 2860} \end{array}$$

k)

$$\begin{array}{r} \square \\ 2 \overline{) 8864} \end{array}$$

l)

$$\begin{array}{r} \square \\ 3 \overline{) 9063} \end{array}$$

m)

$$\begin{array}{r} \square \\ 2 \overline{) 8000} \end{array}$$

thousands first!

n)

$$\begin{array}{r} \square \\ 2 \overline{) 4806} \end{array}$$

o)

$$\begin{array}{r} \square \\ 3 \overline{) 3009} \end{array}$$

p)

$$\begin{array}{r} \square \\ 4 \overline{) 4048} \end{array}$$

Skill 9.2 Dividing a large number by a single digit, with carry over - no remainder.

MM5 11 22 33 44
MM6 11 22 33 44

- Divide from left to right across the digits one at a time.
- If any result is less than 1: Break down the number being divided into. 'Carry over' this amount to the next column. Add on the carry. Then try dividing again.

Q.

$$\begin{array}{r} \square \\ 4 \overline{) 128} \end{array}$$

A.

$$\begin{array}{r} \boxed{32} \\ 4 \overline{) 128} \\ \underline{12} \\ 8 \\ \underline{8} \\ 0 \end{array}$$

hundreds first!

hundreds tens units

Hundreds:

$$1 \div 4 = ?$$

The result is < 1 .

Break down the 1 hundred into 10 tens and carry them to the tens column.

Tens:

$$2 + 10 \text{ (carry over)} = 12$$

$$12 \div 4 = 3 \quad \Rightarrow 3 \text{ tens}$$

Units:

$$8 \div 4 = 2 \quad \Rightarrow 2 \text{ units}$$

Read as: 128 divided by 4 equals?
OR How many 4's go into 128?
OR 128 divides by 4 how many times?

Consider: $128 \div 4 = 32$
 $4 \times 32 = 128$

a)

$$\begin{array}{r} \boxed{103} \\ 5 \overline{) 515} \\ \underline{5} \\ 1 \\ \underline{10} \\ 15 \\ \underline{15} \\ 0 \end{array}$$

hundreds first!

b)

$$\begin{array}{r} \square \\ 2 \overline{) 324} \end{array}$$

hundreds first!

c)

$$\begin{array}{r} \square \\ 3 \overline{) 453} \end{array}$$

d)

$$\begin{array}{r} \square \\ 7 \overline{) 392} \end{array}$$

e)

$$\begin{array}{r} \square \\ 4 \overline{) 312} \end{array}$$

f)

$$\begin{array}{r} \square \\ 8 \overline{) 592} \end{array}$$

g)

$$\begin{array}{r} \square \\ 6 \overline{) 204} \end{array}$$

h)

$$\begin{array}{r} \square \\ 9 \overline{) 369} \end{array}$$

i)

$$\begin{array}{r} \square \\ 5 \overline{) 5150} \end{array}$$

(thousands first!)

j)

$$\begin{array}{r} \square \\ 3 \overline{) 4125} \end{array}$$

k)

$$\begin{array}{r} \square \\ 2 \overline{) 1734} \end{array}$$

l)

$$\begin{array}{r} \square \\ 4 \overline{) 1060} \end{array}$$

m)

$$\begin{array}{r} \square \\ 3 \overline{) 6081} \end{array}$$

n)

$$\begin{array}{r} \square \\ 4 \overline{) 1112} \end{array}$$

o)

$$\begin{array}{r} \square \\ 8 \overline{) 3616} \end{array}$$

p)

$$\begin{array}{r} \square \\ 6 \overline{) 7218} \end{array}$$