

6. [Large Number \times, \div]

Skill 6.1 Multiplying a large number by a power of 10.

MM7 1 2 2 3 3 4 4
MM8 1 2 2 3 3 4 4

When the multiplication is displayed in a **horizontal line**:

- Add the same number of zeros at the end of the given number as there are zeros in the power of 10.

When the multiplication is displayed in a **vertical algorithm**:

- Move each digit of the given number as many places to the left as there are zeros in the power of 10.
- Add zeros as place holders in the vacated places.

Q. $376 \times 1000 =$

A. $376 \times 1000 = 376000$ *Add 3 zeros*

a) $318 \times 10 =$

3180

b) $2040 \times 10 =$

c) $9080 \times 10 =$

d) $238 \times 100 =$

e) $7015 \times 100 =$

f) $4619 \times 100 =$

g) $179 \times 1000 =$

h) $412 \times 1000 =$

i) $905 \times 1000 =$

j) $506 \times 1000 =$

k) $803 \times 1000 =$

l) $248 \times 1000 =$

Skill 6.2 Dividing a large number by a power of 10.

MM7 1 1 2 2 3 3 4 4
MM8 1 1 2 2 3 3 4 4

- Remove as many zeros from the end of the given number as there are zeros in the power of 10.

Hint: If the division is written as a fraction, simply cross off respective zeros from the top and bottom of the fraction.

Q. $850\,000 \div 1000 =$

A. $850\cancel{000} \div 1\cancel{000} =$
 $= 850$

OR $850\,000 \div 1000$

$$= \frac{850\,000 \div 1000}{1000 \div 1000}$$

$$= \frac{850\cancel{000}}{1\cancel{000}}$$

$$= 850$$

Any division can be written as a fraction.

Simplify by dividing both the numerator and denominator by 1000.

Cross off the respective zeros.

a) $460 \div 10 =$

$$= \frac{460 \div 10}{10 \div 10}$$

$$= \frac{46\cancel{0}}{1\cancel{0}} = \boxed{46}$$

b) $280 \div 10 =$

$$= \frac{280 \div 10}{10 \div 10}$$

$$= \frac{28\cancel{0}}{1\cancel{0}} = \boxed{}$$

c) $5020 \div 10 =$

$$=$$

$$= \frac{502\cancel{0}}{1\cancel{0}} = \boxed{}$$

d) $8900 \div 100 =$

$$= \frac{8900 \div 100}{100 \div 100}$$

$$= \frac{89\cancel{00}}{1\cancel{00}} = \boxed{}$$

e) $1500 \div 100 =$

$$=$$

$$= \frac{15\cancel{00}}{1\cancel{00}} = \boxed{}$$

f) $37000 \div 100 =$

$$=$$

$$= \frac{370\cancel{00}}{1\cancel{00}} = \boxed{}$$

g) $23\,000 \div 100 =$

$$=$$

$$= \frac{230\cancel{00}}{1\cancel{00}} = \boxed{}$$

h) $480\,000 \div 100 =$

$$=$$

$$= \frac{4800\cancel{00}}{1\cancel{00}} = \boxed{}$$

i) $200\,500 \div 100 =$

$$=$$

$$= \frac{2005\cancel{00}}{1\cancel{00}} = \boxed{}$$

j) $570\,000 \div 1000 =$

$$=$$

$$= \frac{570\cancel{000}}{1\cancel{000}} = \boxed{}$$

k) $706\,000 \div 1000 =$

$$=$$

$$= \frac{706\cancel{000}}{1\cancel{000}} = \boxed{}$$

l) $309\,000 \div 1000 =$

$$=$$

$$= \frac{309\cancel{000}}{1\cancel{000}} = \boxed{}$$

Skill 6.3 Multiplying a large number by a single digit.

MM7 11 22 33 44
MM8 11 22 33 44

- Multiply the number by the single digit working from right to left.
- If there is a 'carry over': First multiply.
Then add on the carry over.

Q. $4019 \times 7 =$

A. $4019 \times 7 = 28133$

Units: $7 \times 9 = 63$

63 units = 6 tens and 3 units \Rightarrow 3 units
Carry the 6 tens to the next column.

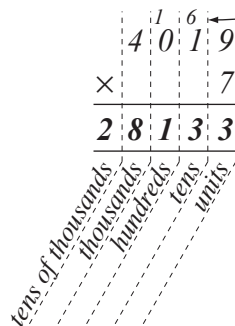
Tens: $7 \times 1 = 7, 7 + 6 = 13$

13 tens = 1 hundred and 3 tens \Rightarrow 3 tens
Carry the 1 hundred to the next column.

Hundreds: $7 \times 0 = 0$

$0 + 1 = 1 \Rightarrow$ 1 hundred

Thousands: $7 \times 4 = 28 \Rightarrow$ 28 thousand



a) $65 \times 6 =$

390

b) $34 \times 9 =$

c) $59 \times 7 =$

$$\begin{array}{r} \overset{3}{6} 5 \\ \times \quad 6 \\ \hline 390 \end{array}$$

Units first!

$$\begin{array}{r} 34 \\ \times \quad 9 \\ \hline \end{array}$$

$$\begin{array}{r} 59 \\ \times \quad 7 \\ \hline \end{array}$$

d) $517 \times 3 =$

e) $265 \times 4 =$

f) $440 \times 8 =$

$$\begin{array}{r} 5 \overset{2}{1} 7 \\ \times \quad 3 \\ \hline \end{array}$$

Units first!

$$\begin{array}{r} 265 \\ \times \quad 4 \\ \hline \end{array}$$

$$\begin{array}{r} 440 \\ \times \quad 8 \\ \hline \end{array}$$

g) $374 \times 7 =$

h) $1043 \times 6 =$

i) $2015 \times 5 =$

$$\begin{array}{r} 3 \overset{2}{7} 4 \\ \times \quad 7 \\ \hline \end{array}$$

$$\begin{array}{r} 1043 \\ \times \quad 6 \\ \hline \end{array}$$

$$\begin{array}{r} 2015 \\ \times \quad 5 \\ \hline \end{array}$$

j) $3627 \times 2 =$

k) $5214 \times 3 =$

l) $4382 \times 4 =$

$$\begin{array}{r} 3627 \\ \times \quad 2 \\ \hline \end{array}$$

$$\begin{array}{r} 5214 \\ \times \quad 3 \\ \hline \end{array}$$

$$\begin{array}{r} 4382 \\ \times \quad 4 \\ \hline \end{array}$$

Skill 6.4 Dividing a large number by a single digit.

MM7 11 2 2 3 3 4 4
MM8 11 2 2 3 3 4 4

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

Q. $7168 \div 8 =$

A. $7168 \div 8 = 896$

$$\begin{array}{r} 896 \\ 8 \overline{) 7168} \\ \underline{8} \\ 11 \\ \underline{8} \\ 36 \\ \underline{32} \\ 48 \\ \underline{48} \\ 0 \end{array}$$

Divide 8 into 7.

8 doesn't divide into 7, so 'carry over' the 7 groups of 1000 and make 71 groups of 100.

8 divides into 71 eight times with 7 remainder. Write an 8 above the 1 and carry the remaining 7 groups of 100 to the tens column to make 76 tens.

Divide 8 into 76.

8 divides into 76 nine times and 4 remainder. Write a 9 above the 6 and carry the remaining 4 groups of tens to the units column to make 48 units.

Divide 8 into 48.

8 divides into 48 six times and 0 remainder.
Write a 6 above the 8.

Read as: 7168 divided by 8

OR How many times can 8 be taken from 7168?

OR How many 8's go into 7168?

a) $468 \div 3 =$

156

$$\begin{array}{r} 156 \\ 3 \overline{) 468} \\ \underline{3} \\ 16 \\ \underline{15} \\ 18 \\ \underline{18} \\ 0 \end{array}$$

b) $356 \div 4 =$

$$\begin{array}{r} 89 \\ 4 \overline{) 356} \\ \underline{32} \\ 36 \\ \underline{32} \\ 4 \\ \underline{4} \\ 0 \end{array}$$

c) $475 \div 5 =$

$$\begin{array}{r} 95 \\ 5 \overline{) 475} \\ \underline{45} \\ 25 \\ \underline{25} \\ 0 \end{array}$$

d) $546 \div 6 =$

$$\begin{array}{r} 91 \\ 6 \overline{) 546} \\ \underline{54} \\ 6 \\ \underline{6} \\ 0 \end{array}$$

e) $296 \div 8 =$

$$\begin{array}{r} 37 \\ 8 \overline{) 296} \\ \underline{24} \\ 56 \\ \underline{56} \\ 0 \end{array}$$

f) $387 \div 9 =$

$$\begin{array}{r} 43 \\ 9 \overline{) 387} \\ \underline{36} \\ 27 \\ \underline{27} \\ 0 \end{array}$$

g) $2214 \div 3 =$

$$\begin{array}{r} 738 \\ 3 \overline{) 2214} \\ \underline{21} \\ 14 \\ \underline{12} \\ 24 \\ \underline{24} \\ 0 \end{array}$$

h) $2046 \div 6 =$

$$\begin{array}{r} 341 \\ 6 \overline{) 2046} \\ \underline{18} \\ 24 \\ \underline{24} \\ 6 \\ \underline{6} \\ 0 \end{array}$$

i) $4085 \div 5 =$

$$\begin{array}{r} 817 \\ 5 \overline{) 4085} \\ \underline{40} \\ 8 \\ \underline{8} \\ 5 \\ \underline{5} \\ 0 \end{array}$$

j) $2364 \div 4 =$

$$\begin{array}{r} 591 \\ 4 \overline{) 2364} \\ \underline{20} \\ 36 \\ \underline{32} \\ 44 \\ \underline{40} \\ 4 \\ \underline{4} \\ 0 \end{array}$$

k) $4347 \div 7 =$

$$\begin{array}{r} 621 \\ 7 \overline{) 4347} \\ \underline{42} \\ 14 \\ \underline{14} \\ 7 \\ \underline{7} \\ 0 \end{array}$$

l) $2392 \div 8 =$

$$\begin{array}{r} 299 \\ 8 \overline{) 2392} \\ \underline{16} \\ 79 \\ \underline{72} \\ 19 \\ \underline{16} \\ 22 \\ \underline{22} \\ 0 \end{array}$$

m) $3608 \div 4 =$

$$\begin{array}{r} 902 \\ 4 \overline{) 3608} \\ \underline{32} \\ 40 \\ \underline{40} \\ 8 \\ \underline{8} \\ 0 \end{array}$$

n) $3725 \div 5 =$

$$\begin{array}{r} 745 \\ 5 \overline{) 3725} \\ \underline{25} \\ 12 \\ \underline{10} \\ 22 \\ \underline{20} \\ 25 \\ \underline{25} \\ 0 \end{array}$$

o) $2268 \div 9 =$

$$\begin{array}{r} 252 \\ 9 \overline{) 2268} \\ \underline{18} \\ 46 \\ \underline{45} \\ 18 \\ \underline{18} \\ 0 \end{array}$$

Skill 6.5 Multiplying a large number by a multiple of 10.

MM7 11 22 33 44
MM8 11 22 33 44

- Consider the zeros as making groups of 10's or 100's and place them at the end.
- Then multiply by the remaining digit as though it was a unit.

Q. $554 \times 300 =$

A. $554 \times 300 = 166\,200$

Consider 300 as 3 groups of 100.

Multiply 554 by 3:
 $554 \times 3 = 1662$

To show we want groups of 100,
place two zeros after 1662.

$$\begin{array}{r} \overset{1}{5} \overset{1}{5} \overset{4}{4} \\ \times \quad \quad \quad \overset{3}{3} \overset{0}{0} \overset{0}{0} \\ \hline 1 \ 6 \ 6 \ 2 \ 0 \ 0 \end{array}$$

a) $98 \times 70 =$

6860

b) $75 \times 60 =$

c) $619 \times 20 =$

$$\begin{array}{r} \overset{5}{9} \ 8 \\ \times \quad \quad \quad \overset{7}{7} \ 0 \\ \hline 6 \ 8 \ 6 \ 0 \end{array}$$

$$\begin{array}{r} \overset{3}{7} \ 5 \\ \times \quad \quad \quad \overset{6}{6} \ 0 \\ \hline \quad \quad \quad 0 \ 0 \end{array}$$

$$\begin{array}{r} \overset{6}{6} \ \overset{1}{1} \ 9 \\ \times \quad \quad \quad \overset{2}{2} \ 0 \\ \hline \quad \quad \quad \quad \quad 0 \end{array}$$

d) $346 \times 50 =$

e) $477 \times 40 =$

f) $537 \times 30 =$

$$\begin{array}{r} \overset{3}{3} \ \overset{4}{4} \ 6 \\ \times \quad \quad \quad \overset{5}{5} \ 0 \\ \hline \quad \quad \quad \quad \quad \quad \end{array}$$

$$\begin{array}{r} \overset{4}{4} \ \overset{7}{7} \ 7 \\ \times \quad \quad \quad \overset{4}{4} \ 0 \\ \hline \quad \quad \quad \quad \quad \quad \end{array}$$

$$\begin{array}{r} \overset{5}{5} \ \overset{3}{3} \ 7 \\ \times \quad \quad \quad \overset{3}{3} \ 0 \\ \hline \quad \quad \quad \quad \quad \quad \end{array}$$

g) $327 \times 400 =$

h) $148 \times 600 =$

i) $563 \times 200 =$

$$\begin{array}{r} \overset{1}{3} \ \overset{5}{2} \ 7 \\ \times \quad \quad \quad \overset{4}{4} \ 0 \ 0 \\ \hline 1 \ 3 \ 0 \ 8 \ 0 \ 0 \end{array}$$

$$\begin{array}{r} \overset{1}{1} \ \overset{4}{4} \ 8 \\ \times \quad \quad \quad \overset{6}{6} \ 0 \ 0 \\ \hline \quad \quad \quad \quad \quad \quad \end{array}$$

$$\begin{array}{r} \overset{5}{5} \ \overset{6}{6} \ 3 \\ \times \quad \quad \quad \overset{2}{2} \ 0 \ 0 \\ \hline \quad \quad \quad \quad \quad \quad \end{array}$$

j) $206 \times 500 =$

k) $412 \times 700 =$

l) $3478 \times 200 =$

$$\begin{array}{r} \overset{2}{2} \ 0 \ 6 \\ \times \quad \quad \quad \overset{5}{5} \ 0 \ 0 \\ \hline \quad \quad \quad \quad \quad \quad \end{array}$$

$$\begin{array}{r} \overset{4}{4} \ \overset{1}{1} \ 2 \\ \times \quad \quad \quad \overset{7}{7} \ 0 \ 0 \\ \hline \quad \quad \quad \quad \quad \quad \end{array}$$

$$\begin{array}{r} \overset{3}{3} \ \overset{4}{4} \ \overset{7}{7} \ 8 \\ \times \quad \quad \quad \overset{2}{2} \ 0 \ 0 \\ \hline \quad \quad \quad \quad \quad \quad \end{array}$$

m) $2500 \times 60 =$

n) $1200 \times 70 =$

o) $1500 \times 80 =$

$$\begin{array}{r} \overset{2}{2} \ \overset{5}{5} \ 0 \ 0 \\ \times \quad \quad \quad \overset{6}{6} \ 0 \\ \hline \quad \quad \quad \quad \quad \quad \end{array}$$

$$\begin{array}{r} \overset{1}{1} \ \overset{2}{2} \ 0 \ 0 \\ \times \quad \quad \quad \overset{7}{7} \ 0 \\ \hline \quad \quad \quad \quad \quad \quad \end{array}$$

$$\begin{array}{r} \overset{1}{1} \ \overset{5}{5} \ 0 \ 0 \\ \times \quad \quad \quad \overset{8}{8} \ 0 \\ \hline \quad \quad \quad \quad \quad \quad \end{array}$$

Skill 6.6 Dividing a large number by a multiple of 10.

MM7 11 22 33 44
MM8 11 22 33 44

- Remove as many zeros from the end of the given number as there are zeros in the multiple of 10.
- Divide by the remaining digit working from left to right.

Q. $2280 \div 60 =$

A. $2280 \div 60 =$

$$= \frac{228\cancel{0} \div 10}{6\cancel{0} \div 10}$$

$$= 38$$

$$\begin{array}{r} 38 \\ 6 \overline{) 2280} \\ \underline{18} \\ 48 \\ \underline{48} \\ 0 \end{array}$$

Divide both numbers by 10, by crossing off the zeros.

Complete the division $228 \div 6$
6 divides into 22 three times and 4 remainder.
Write a 3 above the 2 and carry the remaining 4 groups of tens to the units column to make 48 units.

6 divides into 48 eight times and 0 remainder.
Write an 8 above the 8.

a) $5600 \div 20 =$

$$= \frac{56\cancel{0}\cancel{0} \div 10}{2\cancel{0} \div 10} = \boxed{280}$$

$$\begin{array}{r} 280 \\ 2 \overline{) 5600} \\ \underline{10} \\ 16 \\ \underline{12} \\ 40 \\ \underline{40} \\ 0 \end{array}$$

b) $4800 \div 30 =$

$$= \boxed{}$$

$$\begin{array}{r} \\ 3 \overline{) 4800} \\ \underline{3} \\ 18 \\ \underline{18} \\ 0 \end{array}$$

c) $8160 \div 40 =$

$$= \boxed{}$$

$$\begin{array}{r} \\ 4 \overline{) 8160} \\ \underline{8} \\ 16 \\ \underline{16} \\ 0 \end{array}$$

d) $7350 \div 50 =$

$$= \boxed{}$$

$$\begin{array}{r} \\ 5 \overline{) 7350} \\ \underline{5} \\ 23 \\ \underline{20} \\ 35 \\ \underline{35} \\ 0 \end{array}$$

e) $9660 \div 60 =$

$$= \boxed{}$$

$$\begin{array}{r} \\ 6 \overline{) 9660} \\ \underline{6} \\ 36 \\ \underline{36} \\ 0 \end{array}$$

f) $5240 \div 40 =$

$$= \boxed{}$$

$$\begin{array}{r} \\ \overline{) 5240} \\ \\ \\ \end{array}$$

g) $18000 \div 400 =$

$$= \boxed{}$$

$$\begin{array}{r} \\ 4 \overline{) 18000} \\ \underline{12} \\ 60 \\ \underline{60} \\ 0 \end{array}$$

h) $22000 \div 500 =$

$$= \boxed{}$$

$$\begin{array}{r} \\ 5 \overline{) 22000} \\ \\ \\ \end{array}$$

i) $31000 \div 200 =$

$$= \boxed{}$$

$$\begin{array}{r} \\ \overline{) 31000} \\ \\ \\ \end{array}$$

j) $40500 \div 300 =$

$$= \boxed{}$$

$$\begin{array}{r} \\ 3 \overline{) 40500} \\ \underline{3} \\ 10 \\ \underline{9} \\ 15 \\ \underline{15} \\ 0 \end{array}$$

k) $20400 \div 600 =$

$$= \boxed{}$$

$$\begin{array}{r} \\ 6 \overline{) 20400} \\ \underline{12} \\ 84 \\ \underline{84} \\ 0 \end{array}$$

l) $98700 \div 700 =$

$$= \boxed{}$$

$$\begin{array}{r} \\ \overline{) 98700} \\ \\ \\ \end{array}$$

Skill 6.7 Multiplying a large number by a two-digit number (2).

MM7 11 22 3 4
MM8 11 22 3 4 4

j) $804 \times 75 =$

$$\begin{array}{r} 804 \\ \times 75 \\ \hline \\ \hline \\ \hline \end{array}$$

k) $532 \times 28 =$

$$\begin{array}{r} 532 \\ \times 28 \\ \hline \\ \hline \\ \hline \end{array}$$

l) $926 \times 45 =$

$$\begin{array}{r} 926 \\ \times 45 \\ \hline \\ \hline \\ \hline \end{array}$$

m) $1602 \times 19 =$

$$\begin{array}{r} 1602 \\ \times 19 \\ \hline \\ \hline \\ \hline \end{array}$$

n) $4086 \times 24 =$

$$\begin{array}{r} 4086 \\ \times 24 \\ \hline \\ \hline \\ \hline \end{array}$$

o) $1903 \times 36 =$

$$\begin{array}{r} 1903 \\ \times 36 \\ \hline \\ \hline \\ \hline \end{array}$$

p) $3015 \times 45 =$

$$\begin{array}{r} 3015 \\ \times 45 \\ \hline \\ \hline \\ \hline \end{array}$$

q) $2038 \times 87 =$

$$\begin{array}{r} 2038 \\ \times 87 \\ \hline \\ \hline \\ \hline \end{array}$$

r) $5217 \times 23 =$

$$\begin{array}{r} 5217 \\ \times 23 \\ \hline \\ \hline \\ \hline \end{array}$$

s) $2009 \times 73 =$

$$\begin{array}{r} 2009 \\ \times 73 \\ \hline \\ \hline \\ \hline \end{array}$$

t) $3014 \times 46 =$

$$\begin{array}{r} 3014 \\ \times 46 \\ \hline \\ \hline \\ \hline \end{array}$$

u) $4268 \times 29 =$

$$\begin{array}{r} 4268 \\ \times 29 \\ \hline \\ \hline \\ \hline \end{array}$$

Skill 6.8 Dividing a large number by a two-digit number (1).

- Work from left to right.
- Break down the division into smaller divisions by dividing into only as many digits as you need to get an answer greater than 1.
- It may be difficult, so guess the number of divisions, and multiply your guess to check.
- Subtract your answer from the original number to get the remainder, which must be less than the number you are dividing by.
- Continue in this way by bringing down the next digit to make the next number to divide into.
- Repeat until the result of the subtraction is zero.

Q. $9690 \div 15 =$

A. $9690 \div 15 = 646$

$$\begin{array}{r}
 646 \\
 15 \overline{) 9690} \\
 \underline{90} \\
 69 \\
 \underline{60} \\
 90 \\
 \underline{90} \\
 0
 \end{array}$$

Start at the left.
 9 is too small to divide 15 into, so consider 96.
 Divide $96 \div 15 = ?$
 6 is a good guess.
 Check by multiplying $6 \times 15 = 90$
 Subtract $96 - 90 = 6$
 Write 6 above the 6.

 Bring down the 9.
 Divide $69 \div 15 = ?$ (Guess 4)
 Check by multiplying $4 \times 15 = 60$
 Subtract $69 - 60 = 9$
 Write 4 above the 9.

 Bring down the 0.
 Divide $90 \div 15 = 6$ (No remainder)
 Write 6 above the 0.

$$\begin{array}{r}
 646 \\
 15 \overline{) 9690}
 \end{array}$$

OR Work as a short division.

a) $725 \div 25 =$

29

$$\begin{array}{r}
 29 \\
 25 \overline{) 725} \\
 \underline{50} \\
 225 \\
 \underline{225} \\
 0
 \end{array}$$

b) $912 \div 16 =$

$$\begin{array}{r}
 5 \\
 16 \overline{) 912} \\
 \underline{80} \\
 12 \\
 0
 \end{array}$$

c) $948 \div 12 =$

$$\begin{array}{r}
 \\
 12 \overline{) 948} \\
 0 \\
 0 \\
 0
 \end{array}$$

d) $2607 \div 11 =$

$$\begin{array}{r}
 237 \\
 11 \overline{) 2607} \\
 \underline{22} \\
 40 \\
 \underline{33} \\
 77 \\
 \underline{77} \\
 0
 \end{array}$$

e) $3682 \div 14 =$

$$\begin{array}{r}
 \\
 14 \overline{) 3682} \\
 \underline{28} \\
 82 \\
 0
 \end{array}$$

f) $4368 \div 12 =$

$$\begin{array}{r}
 \\
 12 \overline{) 4368} \\
 0 \\
 0 \\
 0
 \end{array}$$

Skill 6.8 Dividing a large number by a two-digit number (2).

MM7 11 22 33 44
MM8 11 22 33 44

g) $5550 \div 15 =$ h) $8085 \div 11 =$ i) $7680 \div 12 =$

$$\begin{array}{r} 15 \overline{) 5550} \\ \underline{00} \\ 55 \\ \underline{00} \\ 550 \\ \underline{00} \\ 5500 \\ \underline{00} \\ 5500 \\ \underline{00} \\ 0000 \end{array}$$

$$\begin{array}{r} 11 \overline{) 8085} \\ \underline{00} \\ 80 \\ \underline{00} \\ 88 \\ \underline{00} \\ 85 \\ \underline{00} \\ 850 \\ \underline{00} \\ 8500 \\ \underline{00} \\ 0000 \end{array}$$

$$\begin{array}{r} 12 \overline{) 7680} \\ \underline{00} \\ 76 \\ \underline{00} \\ 88 \\ \underline{00} \\ 80 \\ \underline{00} \\ 800 \\ \underline{00} \\ 8000 \\ \underline{00} \\ 0000 \end{array}$$

j) $7252 \div 14 =$ k) $4224 \div 22 =$ l) $5350 \div 25 =$

$$\begin{array}{r} 14 \overline{) 7252} \\ \underline{00} \\ 72 \\ \underline{00} \\ 55 \\ \underline{00} \\ 52 \\ \underline{00} \\ 520 \\ \underline{00} \\ 5200 \\ \underline{00} \\ 0000 \end{array}$$

$$\begin{array}{r} 22 \overline{) 4224} \\ \underline{00} \\ 42 \\ \underline{00} \\ 22 \\ \underline{00} \\ 24 \\ \underline{00} \\ 240 \\ \underline{00} \\ 2400 \\ \underline{00} \\ 0000 \end{array}$$

$$\begin{array}{r} 25 \overline{) 5350} \\ \underline{00} \\ 53 \\ \underline{00} \\ 35 \\ \underline{00} \\ 350 \\ \underline{00} \\ 3500 \\ \underline{00} \\ 0000 \end{array}$$

m) $3570 \div 15 =$ n) $9030 \div 21 =$ o) $3335 \div 23 =$

$$\begin{array}{r} 15 \overline{) 3570} \\ \underline{00} \\ 35 \\ \underline{00} \\ 70 \\ \underline{00} \\ 700 \\ \underline{00} \\ 7000 \\ \underline{00} \\ 0000 \end{array}$$

$$\begin{array}{r} 21 \overline{) 9030} \\ \underline{00} \\ 90 \\ \underline{00} \\ 33 \\ \underline{00} \\ 30 \\ \underline{00} \\ 300 \\ \underline{00} \\ 3000 \\ \underline{00} \\ 0000 \end{array}$$

$$\begin{array}{r} 23 \overline{) 3335} \\ \underline{00} \\ 33 \\ \underline{00} \\ 33 \\ \underline{00} \\ 35 \\ \underline{00} \\ 350 \\ \underline{00} \\ 3500 \\ \underline{00} \\ 0000 \end{array}$$

p) $36864 \div 12 =$ q) $25795 \div 11 =$ r) $20650 \div 25 =$

$$\begin{array}{r} 12 \overline{) 36864} \\ \underline{00} \\ 36 \\ \underline{00} \\ 88 \\ \underline{00} \\ 66 \\ \underline{00} \\ 64 \\ \underline{00} \\ 640 \\ \underline{00} \\ 6400 \\ \underline{00} \\ 0000 \end{array}$$

$$\begin{array}{r} 11 \overline{) 25795} \\ \underline{00} \\ 25 \\ \underline{00} \\ 77 \\ \underline{00} \\ 99 \\ \underline{00} \\ 95 \\ \underline{00} \\ 950 \\ \underline{00} \\ 9500 \\ \underline{00} \\ 0000 \end{array}$$

$$\begin{array}{r} 25 \overline{) 20650} \\ \underline{00} \\ 20 \\ \underline{00} \\ 66 \\ \underline{00} \\ 55 \\ \underline{00} \\ 50 \\ \underline{00} \\ 500 \\ \underline{00} \\ 5000 \\ \underline{00} \\ 0000 \end{array}$$

Skill 6.10 Dividing a whole number - answer as a terminating decimal.

MM7 11 22 33 44
MM8 11 22 33 44

- Line up the decimal point in your answer.
 - Place a decimal point and more zeros at the end of the whole number to be divided.
 - Divide into the whole number and continue until you get an exact division with no remainder.
- Hint: When no decimal point is shown it is always placed on the far right of the number.*

Q. $3458 \div 8 =$

A. $3458 \div 8 = 432.25$

$$\begin{array}{r} 432.25 \\ 8 \overline{) 3458.200} \end{array}$$

Start at the left.

Divide 8 into 3458.00

Continue until you get an exact number with no remainder.

a) $1487 \div 2 =$

b) $6014 \div 4 =$

c) $2564 \div 5 =$

$$\begin{array}{r} 743.5 \\ 2 \overline{) 1487.0} \end{array}$$

$$\begin{array}{r} 1503.5 \\ 4 \overline{) 6014.0} \end{array}$$

$$\begin{array}{r} 512.8 \\ 5 \overline{) 2564.0} \end{array}$$

d) $5945 \div 4 =$

e) $3564 \div 8 =$

f) $3057 \div 2 =$

$$\begin{array}{r} 1486.25 \\ 4 \overline{) 5945.00} \end{array}$$

$$\begin{array}{r} 445.5 \\ 8 \overline{) 3564.0} \end{array}$$

$$\begin{array}{r} 1528.5 \\ 2 \overline{) 3057.0} \end{array}$$

g) $1806 \div 5 =$

h) $2732 \div 8 =$

i) $7263 \div 5 =$

$$\begin{array}{r} 361.2 \\ 5 \overline{) 1806.0} \end{array}$$

$$\begin{array}{r} 341.5 \\ 8 \overline{) 2732.0} \end{array}$$

$$\begin{array}{r} 1452.6 \\ 5 \overline{) 7263.0} \end{array}$$

j) $4026 \div 4 =$

k) $7385 \div 2 =$

l) $5862 \div 8 =$

$$\begin{array}{r} 1006.5 \\ 4 \overline{) 4026.0} \end{array}$$

$$\begin{array}{r} 3692.5 \\ 2 \overline{) 7385.0} \end{array}$$

$$\begin{array}{r} 732.75 \\ 8 \overline{) 5862.0} \end{array}$$

m) $9305 \div 2 =$

n) $2189 \div 4 =$

o) $9287 \div 5 =$

$$\begin{array}{r} 4652.5 \\ 2 \overline{) 9305.0} \end{array}$$

$$\begin{array}{r} 547.25 \\ 4 \overline{) 2189.00} \end{array}$$

$$\begin{array}{r} 1857.4 \\ 5 \overline{) 9287.0} \end{array}$$