Multiplying decimals by 10, 100 and 1,000
(1) Complete the multiplications.

a) \begin{tabular}{|c|c|c|c|c|}
\hline H \& T \& O \& Tths \& Hths \\
\hline \& \& 3 \& 7 \& \\
\hline

$\quad 3.7 \times 10=$

\\
\hline
\end{tabular}

b)

c)

d)


What do you notice when you multiply a number by 10 ?
(2) Complete the multiplications.
a) $1.7 \times 10=$ $\square$
d) $13.4 \times 10=$ $\square$
b) $1.75 \times 10=$ $\square$
e) $10 \times 13.04=$ $\square$
c) $1.73 \times 10=$ $\square$
f) $130.4 \times 10=$ $\square$

Complete the multiplications.
a)

| $H$ | T | O | Tths | Hths |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 4 | 0 | 1 |

b)

| $H$ | T | O | Tths | Hths |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 4 | 0 | 1 |

c)

d)

| $H$ | $T$ | $O$ | Tths | Hths |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 4 | 0 | 0 | $\mathbf{5} .05 \times 100=$| $\square$ |
| :---: |

What do you notice when you multiply a number by $100 ?$
(4) Complete the calculations.
a) $7.2 \times 100=$d) $1.89 \times 100=$ $\square$
b) $3.4 \times 100=$ $\square$
e) $73.57 \times 100=$ $\square$
c) $19.5 \times 100=$ $\square$
f) $1.317 \times 100=\square$

5
Amir has multiplied 3.8 by 1,000

The answer is 3.8000
a) What mistake has Amir made?
b) Work out the correct answer.
$3.8 \times 1,000=$ $\square$

6 Complete the multiplications.
a) $4.7 \times 10=\square$
c) $5.84 \times 10=$ $\square$
$4.7 \times 100=$ $\square$
$5.84 \times 100=$

$4.7 \times 1,000=$ $\square$
$5.84 \times 1,000=$ $\square$
b) $19.3 \times 10=$ $\square$
$19.3 \times 100=$ $\square$
d) $18.06 \times 10=$ $\square$
$1,000 \times 19.3=$ $\square$
$100 \times 18.06=$ $\square$

7 Complete the calculations.
a) $7.7 \times \square=770$
b)

b)
e) $8.032 \times$ $\square$ $=80.32$
f)

c) $11.5 \times$
 $=115$
d)

g) $195.32 \times$

h) $\square$ $\times 1,000=7,200$

8 Tommy is 1.4 m tall.
A tree is 10 times as tall as Tommy.
A building is 100 times as tall as Tommy.
a) How tall is the tree?

b) How much taller is the building than the tree?


9 Match the multiplications to the descriptions.

$$
\times 10 \times 10
$$

multiply by 10
$\times 10 \times 10 \times 10$

$$
\times 100 \times 10
$$

multiply by 100

How did you work out the answers? Talk to a partner.

$$
\times 10 \times 1
$$

