

Solve problems with multiplication and division

1 Use the place value counters to complete the calculations.

a)

| H | T | O |
|---------|-------------|---|
| 100 100 | 10 10 10 10 | 1 |
| 100 100 | 10 10 10 10 | 1 |
| 100 100 | 10 10 10 10 | 1 |

| | | | | | |
|-------|---|---|---|---|--|
| | | | | | |
| | | 2 | 4 | 1 | |
| | × | | | 3 | |
| <hr/> | | | | | |
| <hr/> | | | | | |

b)

| | | |
|----|-----------------|-------|
| × | 10 10 10 10 | 1 1 |
| 10 | 100 100 100 100 | 10 10 |
| 10 | 100 100 100 100 | 10 10 |
| 10 | 100 100 100 100 | 10 10 |
| 1 | 10 10 10 10 | 1 1 |
| 1 | 10 10 10 10 | 1 1 |
| 1 | 10 10 10 10 | 1 1 |

| | | | | | |
|-------|---|--|---|---|--|
| | | | | | |
| | | | 4 | 2 | |
| | × | | 3 | 3 | |
| <hr/> | | | | | |
| <hr/> | | | | | |

c)

| H | T | O |
|---------|-------|-----|
| 100 100 | 10 10 | 1 1 |
| 100 100 | | 1 1 |
| | | 1 1 |

| | | | | | |
|--|---|---|---|---|--|
| | | | | | |
| | | | | | |
| | 3 | 4 | 2 | 6 | |

d)

| Th | H | T | O |
|-------------|---------|----|-----|
| 1,000 1,000 | 100 100 | 10 | 1 1 |
| 1,000 1,000 | | | 1 1 |
| 1,000 | | | 1 1 |
| | | | 1 1 |
| | | | 1 |

| | | | | | |
|--|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | 4 | 5 | 2 | 1 | 9 |

2 Pencils are packed in boxes of 6
There are 735 pencils.

a) How many full boxes can be made?

b) How many pencils will be left over?

3 259 people are attending an event.
Each table can seat 8 people.

a) How many tables are needed to seat everyone?

b) How many empty seats will there be on the final table?

4 A multipack of water contains 6 bottles of water.
A box holds 3 multipacks of water.
A shop orders 24 boxes of water.
How many bottles of water have they ordered?

Compare methods with a partner.



- 5 A packet of stickers contains 24 stickers.
 Ron buys 6 packets of stickers.
 He shares the stickers between himself and his two friends.
 How many stickers do they each get?

Dora: I am going to multiply 24 by 6, then divide the answer by 3

Amir: I am going to divide 6 by 3, then multiply by 24

Ron: I am going to do 24×6 , then divide the answer by 2

Tiny: I am going to divide 24 by 3, then multiply by 6

a) Whose method does not work? _____
 What mistake have they made?

b) What is the correct answer?

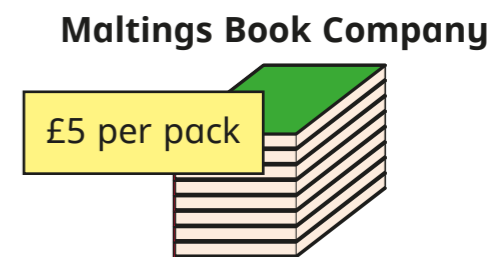
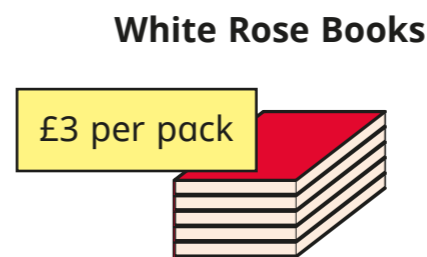
Whose method do you prefer? _____
 Talk about it with a partner.



- 6 White Rose Books sells notebooks in packs of 5
 The Maltings Book Company sells notebooks in packs of 8
 A school needs 243 notebooks for all its pupils.
 a) How many packs would the school need to buy from each shop?

White Rose Books packs
 Maltings Book Company packs

b) At which shop is it cheaper for the school to buy the packs of books they need?



How much cheaper? _____
 £