



# Unit 12

## Strengthen activities

**MISCONCEPTION:** When using column addition or subtraction, children may line the numbers up from right to the left rather than according to their place value.

### Answers

Assessment checkpoint:

Check for alignment in calculations.

**MISCONCEPTION:** Children may not apply exchanges when adding or subtracting decimal numbers.

### Answers

Assessment checkpoint:

Ensure children spot where exchanges of 10 tenths for 1 one have not happened.

**MISCONCEPTION:** When multiplying decimals by 10, children may assume that they should just 'add a zero' onto the end of whatever number they start with. For example, they write the answer to  $4.5 \times 10$  as 4.50.

### Answers

Assessment checkpoint:

False statement: B

Answers will vary for statements.

## Deepen activities

### Answers

#### Activity 1

a) Answers may vary but could include:

0.75, 1, 1.25, 1.5 (the rule is  $+ 0.25$ ) or 1, 2, 4, 8 (the rule is doubling)

b) Answers may vary but could include two-step rules such as:

$\times 3$  and  $- 0.25$

#### Activity 2

Answers will vary but must involve partitioning 3.423 to subtract 1.54 without an exchange.

For example,

$$3.423 = 2 + 1.3 + 0.12 + 0.003$$

$$1.54 = 1 + 0.5 + 0.04$$

$$2 - 1 = 1 \quad 1.3 - 0.5 = 0.8$$

$$0.12 - 0.04 = 0.08$$

$$0.003 - 0 = 0.003$$

$$1 + 0.8 + 0.08 + 0.003 = 1.883$$

$$\text{So, } 3.423 - 1.54 = 1.883$$

#### Activity 3

False.  $51.2 \div 100 \times 10 = 51.2 \div 10 = 5.12$ , whereas  $51.2 \div 1,000 = 0.0512$