

Decimal Fractions - tenths

$$3.7 + \square = 8.9$$

We are learning to reverse add mentally the ones and tenths separately when appropriate.

Jane works out $3.8 + \square = 8.9$ this way:

$$3.8 + 0.2 = 4, 4 + 4.9 = 8.9, 0.2 + 4.9 = 5.1.$$

Joel works out $3.8 + \square = 8.9$ this way:

$$3 + 5 = 8, 0.8 + 0.1 = 0.9, \text{ so the answer is } 5.1.$$

Why is Joel's method better?

Exercise 1

What to do

- 1) Use the strategy of reverse adding mentally the ones and tenths separately (Joel's method) when appropriate to find the number that goes in the box.
- 2) Do the problems in your head first
- 3) Check you are right by writing them down. Show them like the examples above.

1) $4.5 + \square = 8.6$

(2) $1.2 + \square = 9.9$

(3) $4.0 + \square = 7.6$

4) $2.9 + \square = 8.9$

(5) $3.1 + \square = 5.4$

(6) $2.8 + \square = 8.8$

7) $5.6 + \square = 9.6$

(8) $1.1 + \square = 7.7$

Exercise 2

What to do

- 1) Use the strategy of reverse adding mentally the ones and tenths separately (Joel's method) when appropriate to find the number that goes in the box.
- 2) Do the problems in your head first
- 3) Check you are right by writing them down. Show them like the examples above.

1) $\square + 5.4 = 8.4$

(2) $\square + 4.3 = 9.5$

(3) $\square + 2.5 = 8.8$

4) $\square + 2.2 = 8.4$

(5) $\square + 8.2 = 9.9$

(6) $\square + 3.2 = 9.5$

7) $\square + 1.3 = 9.7$

(8) $\square + 4.6 = 9.9$

Exercise 3

What to do

- 1) Use the strategy of reverse adding mentally the ones and tenths separately (Joel's method) when appropriate to find the number that goes in the box.
- 2) Do the problems in your head first
- 3) Check you are right by writing them down. Show them like the examples above.

1) $\square - 4.3 = 3.4$

(2) $\square - 3.6 = 1.2$

(3) $\square - 1.5 = 8.2$

4) $\square - 4.4 = 8.4$

(5) $\square - 3.2 = 4.0$

(6) $\square - 2.8 = 1.1$

Exercise 4

What to do

- 1) Use the strategy of reverse adding mentally the ones and tenths separately (Joel's method) when appropriate to find the number that goes in the box.
- 2) Do the problems in your head first
- 3) Check you are right by writing them down. Show them like the examples above.

1) $44.5 + \square = 45.6$

(2) $81.2 + \square = 82.9$

(3) $13.1 + \square = 25.4$

4) $25.6 + \square = 39.6$

(5) $62.9 + \square = 68.9$

(6) $1.1 + \square = 27.7$

7) $444.4 + \square = 555.5$

(8) $60.6 + \square = 80.8$

Decimal Fractions – Tenths

$$3.7 + \square = 8.9$$

Answers

Why is Joel's method better?

Uses fewer steps. No need to jump to a tidy number as all of the digits in the first number are smaller than the corresponding digits in the second number.

Exercise 1

- | | | |
|--------|---------|---------|
| 1) 4.1 | (2) 8.7 | (3) 3.6 |
| 4) 6 | (5) 2.3 | (6) 6 |
| 7) 4 | (8) 6.6 | |

Exercise 2

- | | | |
|--------|---------|---------|
| 1) 3 | (2) 5.2 | (3) 6.3 |
| 4) 6.2 | (5) 1.7 | (6) 6.3 |
| 7) 8.4 | (8) 5.3 | |

Exercise 3

- | | | |
|---------|---------|---------|
| 1) 7.7 | (2) 4.8 | (3) 9.7 |
| 4) 12.8 | (5) 7.2 | (6) 3.9 |

Exercise 4

- | | | |
|----------|----------|----------|
| 1) 1.1 | (2) 1.7 | (3) 12.3 |
| 4) 14 | (5) 6 | (6) 26.6 |
| 7) 111.1 | (8) 20.2 | |