

## Power maths answers for week 2

Day 1:

**→ pages 18–20**

1. a)

	T	O	·	Tth	Hth
		6	·	5	0
+		4	·	3	1
	1	0	·	8	1

The total cost is £10.81.

b)

	O	·	Tth	Hth
	5	·	7	6
+	3	·	7	9
	9	·	5	5

The total cost is £9.55.

2. a)  $2.3 + 4.6 = 6.9$

	O	·	Tth
	2	·	3
+	4	·	6
	6	·	9

b)  $3.5 + 5.8 = 9.3$

	O	·	Tth
	3	·	5
+	5	·	8
	9	·	3

c)  $1.98 + 0.77 = 2.75$

$$\begin{array}{r}
 \text{O} \quad \cdot \quad \text{Tth} \quad \text{Hth} \\
 \hline
 1 \quad \cdot \quad 9 \quad 8 \\
 + \quad 0 \quad \cdot \quad 7 \quad 7 \\
 \hline
 2 \quad \cdot \quad 7 \quad 5 \\
 \hline
 \end{array}$$

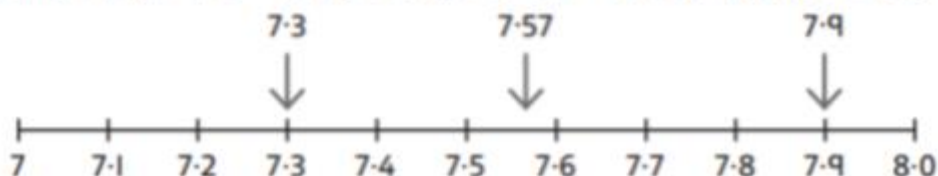
3. a)  $0.502 + 4.165 > 3.258 + 0.875$   
 b)  $8.62 + 6.18 > 2.63 + 1.71 + 3.26$

4. Zac has not aligned the decimal points, so the digits of 11.2 are in the wrong columns for their value.

$$\begin{array}{r}
 \text{T} \quad \text{O} \quad \cdot \quad \text{Tth} \quad \text{Hth} \\
 \hline
 1 \quad 1 \quad \cdot \quad 2 \quad 0 \\
 + \quad \quad 3 \quad \cdot \quad 6 \quad 9 \\
 \hline
 1 \quad 4 \quad \cdot \quad 8 \quad 9 \\
 \hline
 \end{array}$$

The correct answer is £14.89.

5.  $4.5 + 2.8 = 7.3$      $2.75 + 4.82 = 7.57$      $1.823 + 6.077 = 7.9$



6.

	Theatre	Cinema	Zoo	Circus
Cost for 1 adult and 2 children	£49	£26.33	£44.90	£34.20

They can afford to do any of the activities.

## Reflect

Explanations will vary but children should mention adding together digits with the same value (or in the same column). Children should also explain the need to exchange 10 hundredths for 1 tenth.

$$\begin{array}{r}
 \text{O} \quad \cdot \quad \text{Tth} \quad \text{Hth} \\
 \hline
 4 \quad \cdot \quad 5 \quad 3 \\
 + \quad 3 \quad \cdot \quad 7 \quad 8 \\
 \hline
 8 \quad \cdot \quad 3 \quad 1 \\
 \hline
 \end{array}$$

Day 2 answers

→ pages 21–23

$$\begin{array}{r} \text{1. a)} \quad \begin{array}{r} \text{O} \quad \cdot \quad \text{Tth} \quad \text{Hth} \\ \hline 2 \quad \cdot \quad \overset{4}{\cancel{9}} \quad \overset{1}{4} \\ - \quad 1 \quad \cdot \quad 0 \quad 5 \\ \hline 1 \quad \cdot \quad 4 \quad 9 \end{array} \end{array}$$

The loaf of bread costs £1.49.

b) Danny gets £0.16 change.

2. a)  $5.4 - 3.2 = 2.2$

$$\begin{array}{r} \text{O} \quad \cdot \quad \text{Tth} \\ \hline 5 \quad \cdot \quad 4 \\ - \quad 3 \quad \cdot \quad 2 \\ \hline 2 \quad \cdot \quad 2 \end{array}$$

b)  $7.26 - 4.83 = 2.43$

$$\begin{array}{r} \text{O} \quad \cdot \quad \text{Tth} \quad \text{Hth} \\ \hline \overset{6}{\cancel{7}} \quad \cdot \quad \overset{1}{2} \quad 6 \\ - \quad 4 \quad \cdot \quad 8 \quad 3 \\ \hline 2 \quad \cdot \quad 4 \quad 3 \end{array}$$

c)  $2.661 - 0.625 = 2.036$

$$\begin{array}{r} \text{O} \quad \cdot \quad \text{Tth} \quad \text{Hth} \quad \text{Thth} \\ \hline 2 \quad \cdot \quad 6 \quad \overset{5}{\cancel{6}} \quad \overset{1}{1} \\ - \quad 0 \quad \cdot \quad 6 \quad 2 \quad 5 \\ \hline 2 \quad \cdot \quad 0 \quad 3 \quad 6 \end{array}$$

3. a) 7.07

b) 8.6

4. Kate has incorrectly subtracted 9 from 0 in the hundredths column without making an exchange.

	0	·	Tth	Hth
	<del>5</del> 8	·	<del>2</del> 5	10
-	0	·	5	9
	5	·	6	1

5. Holly has 5.8 km left to walk.
6. a) 2.28                      b) 4.98
7. The different between A and C is 57.07 greater than between B and C.

## Reflect

Answers will vary; for example:

Same: Both calculations involve subtracting from 5.8; both answers will be decimals with 1 decimal place; both answers are smaller than 3 ...

Different: If completed using columnar method, a) will not involve exchange but b) will.

Methods will vary; children could use the column method, partitioning or counting up to find the difference. Encourage children to explain why each chosen method is a sensible one for the particular calculation.

Day 3 answers

→ pages 24–26

1. Bella's plane flew 1.61 m further than Ebo's plane.

$$\begin{array}{r} \text{O} \quad \cdot \quad \text{Tth} \quad \text{Hth} \\ \hline 1 \cancel{2} \quad \cdot \quad 1 \cancel{3} \quad 1 \\ - \quad 0 \quad \cdot \quad 7 \quad 0 \\ \hline 1 \quad \cdot \quad 6 \quad 1 \end{array}$$

2. a)  $3.62 + 4.8 = 8.42$

$$\begin{array}{r} \text{O} \quad \cdot \quad \text{Tth} \quad \text{Hth} \\ \hline 3 \quad \cdot \quad 6 \quad 2 \\ + \quad 4 \quad \cdot \quad 8 \quad 0 \\ \hline 8 \quad \cdot \quad 4 \quad 2 \\ \hline \end{array}$$

- b)  $1.96 - 1.258 = 0.702$

$$\begin{array}{r} \text{O} \quad \cdot \quad \text{Tth} \quad \text{Hth} \quad \text{Thth} \\ \hline 1 \quad \cdot \quad 9 \quad \cancel{6} \quad 0 \\ - \quad 1 \quad \cdot \quad 2 \quad 5 \quad 8 \\ \hline 0 \quad \cdot \quad 7 \quad 0 \quad 2 \end{array}$$

3. a) 38.34                      b) 11.372

4. a) 5.03                        b) 114.75

5. Zac has incorrectly written the 7 in 3.7 into the hundredths column rather than the tenths column. The correct answer is  $53.49 - 3.7 = 49.79$ .

T	O	.	Tth	Hth
<del>4</del>	<del>12</del>	.	4	9
-	3	.	7	0
4	9	.	7	9

6. Danny's statement is always true; for example:  
 $5.8 - 3.71 = 2.09$   
 $7.6 - 4.82 = 2.78$   
 $2.3 - 0.51 = 1.79$
7.  $16.1 - 4.125 = 11.975$   
 The difference between A and B is 11.975.
8.  $19.7 + 18.15 = 37.85$   
 $19.7 + 21.25 = 40.95$   
 Sum = 37.85 or 40.95

## Reflect

Answers will vary but should include:

Ensure that the digits go in the correct columns; ensure the decimal points are aligned; use exchange; where columns are empty, insert a zero as a place holder.

## Day 4 answers

→ pages 27–29

1. a)  $7.37$

b) Answers will vary; for example:

Ebo could use a mental method, number line or column addition.

2.  $12 + 2.72 = 14.72$

$3 + 11.72 = 14.72$

$5 + 5 + 4.72 = 14.72$

$5 + 9.72 = 14.72$

$0.72 + 14 = 14.72$

$14.7 + 0.02 = 14.72$

3. a)  $7 - 3.8 = 3.2$

$$\begin{array}{r} \text{O} \quad \cdot \quad \text{Tth} \\ \hline 6\cancel{7} \quad \cdot \quad 10 \\ - \quad 3 \quad \cdot \quad 8 \\ \hline 3 \quad \cdot \quad 2 \end{array}$$

b)  $12 - 4.35 = 7.65$

$$\begin{array}{r} \text{T} \quad \text{O} \quad \cdot \quad \text{Tth} \quad \text{Hth} \\ \hline 1 \quad 2 \quad \cdot \quad 00 \\ - \quad \quad 4 \quad \cdot \quad 35 \\ \hline 7 \quad \cdot \quad 65 \end{array}$$

4. a)  $8 - 2.807 =$

$7.999 - 2.806 = 5.193$

b)  $12 - 4.91 =$

$11.99 - 4.90 = 7.09$

c)  $16 - 1.8 =$

$15.99 - 1.79 = 14.20$

5. a) The total cost is £16.92.

b) There is 281.3 ml of sun cream left.

6. a) 3·45                      d) 14·4  
b) 25·725                    e) 450·85  
c) 10·67                      f) 475·513

7. There is 9,250 ml more milk than lemonade.

8. a) 0·08                      b) 9·52

## Reflect

Number lines drawn may vary, but children should show that the difference between 2·4 and 7 is the same as the difference between 2·3 and 6·9.

### Day 5

#### Mental maths test answers

- |              |              |
|--------------|--------------|
| 1) 1.5       | 12) 560      |
| 2) 3/6       | 13) 6,400    |
| 3) 832,464   | 14) 208      |
| 4) <u>37</u> | 15) 630      |
| 5) 7         | 16) 70       |
| 6) 91        | 17) 239      |
| 7) 573       | 18) 1,3,5,15 |
| 8) 63        | 19) 2,3,5    |
| 9) 342       | 20) 2.1      |
| 10) 153      |              |
| 11) 240      |              |