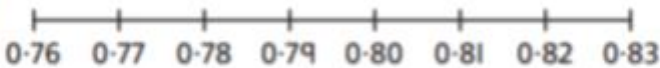
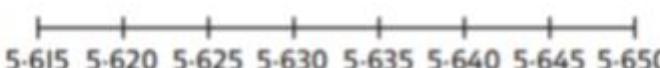


Power maths answers for week 3

Day 1:

→ pages 30–32

- 1** a) 4·6, 4·7, 4·8, 4·9, 5, 5·1, 5·2
b) 11·5, 11·9, 12·3, 12·7, 13·1, 13·5, 13·9, 14·3
c) 15·75, 15·7, 15·65, 15·6, 15·55, 15·5, 15·45
- 2.** a) 
b) 
- 3.** Kate is counting up 0·3 or 3 tenths each time. When she gets to 12 tenths, she has incorrectly said that this is 0·12.
12 tenths = 1 whole and 2 tenths = 1·2
The sequence should be: 0, 0·3, 0·6, 0·9, 1·2, 1·5.
- 4.** a) 10·9; True c) 0; False
b) 39·69; False d) 0·88; True
- 5.** a) 12·49, 12·51, 12·53
b) 18·01
- 6.** a) 0·21, 0·42, 0·63, 0·84, 1·05, 1·26, 1·47
Rule: add 0·21
b) 11·3, 11·7, 12·1, 12·5, 12·9, 13·3, 13·7
Rule: add 0·4
c) 7·68, 7·61, 7·54, 7·47, 7·40, 7·33, 7·26
Rule: subtract 0·07

7.

Round	1	2	3	4	5	6
Distance travelled in round (km)	0.8	1.6	2.4	3.2	4.0	4.8
Total distance travelled so far (km)	0.8	2.4	4.8	8	12	16.8

Reflect

Answers will vary depending on sequence chosen; for example:

0, 0.6, 1.2, 1.8, 2.4, 3.0, 3.6

Rule: add on 0.6 each time

4.9, 4.2, 3.5, 2.8, 2.1, 1.4, 0.7, 0

Rule: subtract 0.7 each time

Day 2 answers

→ pages 33–35

1. a) 98.775 kg b) 55.38 m c) £1.28

2. Toshi drives 33.15 km in total.

3. The mass of the grape is 2.55 g.

4. 0.21 and 0.99 circled.

5. 98.889

6. £7.70

Reflect

Answers will vary; for example:

Lucy the dog has a mass of 54.47 kg and Deano the dog has a mass of 44.305 kg. What is their total mass? (98.775 kg)

Day 3 answers

→ pages 36–38

1. The total cost of the three items is £18.04.
2. £12.48
3. 14.98 litres
4. $3.578 + 8.655 - 2.233 = 10$
5. 3.4 m
6. 0.02
7. Richard has: $£100 - £1.20 = £98.80$
Kate has: $£98.80 - £36.98 = £61.82$
She had: $£61.82 + £24.78$ (stationery) = $£86.60$
 $£98.80 - £86.60 = £12.20$
So, Richard has saved £12.20 more than her.

Reflect

Answers will vary; for example:

Holly is baking. She has a 5 kg bag of flour. She uses 1.1 kg of flour making cup cakes and then 690 g of flour making pancakes. How much flour has she left?

Day 4 answers

→ pages 39–41

1. a) 24 b) 1·3
2. a) 13 (place value grid shows 13)
b) 13·5 (place value grid shows 13·5)
c) 135 (place value grid shows 135)
d) 1·35 (place value grid shows 1·35)
3. Olivia has added a 0 at the end; however, putting a 0 into the hundredths column does not change the value of the number so does not multiply it by 10. The correct answer is obtained by moving the digits one column to the left to get 148.
4. Lines drawn to match calculations to answers:
 $0\cdot003 \times 10 \rightarrow 0\cdot03$
 $3\cdot53 \times 10 \rightarrow 35\cdot3$
 $0\cdot03 \times 10 \rightarrow 0\cdot3$
 $10 \times 0\cdot353 \rightarrow 3\cdot53$
 $0\cdot3 \times 10 \rightarrow 3$
 $10 \times 3\cdot003 \rightarrow 30\cdot03$
 $0\cdot0353 \times 10 \rightarrow 0\cdot353$

5. a) $5.8 \times 10 = 58$
b) $5.82 \times 10 = 58.2$
c) $24.9 \times 10 = 249$
d) $1.09 \times 10 = 10.9$
e) $21.08 \times 10 = 210.8$
f) $0.198 \times 10 = 1.98$
g) $10 \times 21.08 = 210.8$
h) $0.019 \times 10 = 0.19$
i) $30.9 = 3.09 \times 10$
j) $0.04 \times 10 = 0.4$
k) $30.99 = 3.099 \times 10$
l) $0.004 \times 10 = 0.04$
m) $309.9 = 30.99 \times 10$
n) $0.040 \times 10 = 0.4$
6. a) $125 \times 10 = 1,250$ so Luis is not correct. He needs to use the inverse operation to find the missing number. The inverse of multiplication is division, so the missing number is $12.5 \div 10 = 1.25$.
($1.25 \times 10 = 12.5$)
b) $1.5 \times 10 = 15$
 $2.5 \times 10 = 25$
 $0.92 \times 10 = 9.2$
 $10 \times 1.52 = 15.2$
 $0.173 \times 10 = 1.73$
 $1.73 \times 10 = 17.3$
7. Mo has travelled 3 m further than Lexi.

Reflect

Explanations will vary; for example:

When a number is multiplied by 10, the digits do not change and their order does not change. However, each digit moves one place to the left in the place value grid to make its value 10 times greater; for example:

$$1.1 \times 10 = 11$$

Day 5 - Mental maths test answers

- 1) 4.62
- 2) 1.2
- 3) 23
- 4) 4.82
- 5) 60,934
- 6) 242
- 7) 196
- 8) 111
- 9) 4,481

- 10) 159
- 11) 231
- 12) 12.13
- 13) 2,400
- 14) 144
- 15) 900
- 16) 116.2
- 17) £7.30
- 18) £8.52
- 19) 51
- 20) 121