

Week 6

This week in a nutshell:

This week sees an extension of many skills covered so far. For questions 4 and 5, at this stage it is advantageous to utilise listing strategies, as this will further enhance fluency and skill within this topic area.

Question 1: Using a known result

Question 2: Cube roots

Question 3: Dividing by a decimal

Question 4: Lowest common multiple

Question 5: Highest common factor

The questions aim to develop and deepen understanding over the week. Due to the necessity of the topics covered this week, there is an emphasis on the interchangeability of command words, and language flexibility. It may be worth taking some extra time this week to make sure your students are developing their mathematical literacy.

This week's ideas for class discussion include:

Question 1: **Using a known result**

- Why might using a known (or given) result be useful?

Question 2: **Cube roots**

- How can you check whether the cube root you have found is correct?

Question 3: **Dividing by a decimal**

- What techniques do you rely on when dividing by a decimal?

Question 4: **Lowest common multiple**

- Is listing multiples always an efficient strategy for finding the LCM?
- How might you find the LCM when numbers are very large?

Question 5: **Highest common factor**

- Is listing factor pairs always an efficient strategy for finding the HCF?

Week 6: Day 1

1) Given $23.5 \times 15.6 = 366.6$

What is 235×156 ?

2) Find the cube root of 8

3 Work out $25 \div 0.5$

4) What is the lowest common multiple of
4 and 6?

5) What is the highest common factor of
4 and 6?

Week 6: Day 1 Answers

1) Given $23.5 \times 15.6 = 366.6$

What is 235×156 ?

36660

2) Find the cube root of 8

2

3 Work out $25 \div 0.5$

50

4) What is the lowest common multiple of

4 and 6? 12

4, 8, 12, 16, 20, ...

6, 12, 18, 24, 30, ...

5) What is the highest common factor of

4 and 6? 2

1×4

2 $\times 2$

1×6

2 $\times 3$

Week 6: Day 2

1) Given $23.5 \times 15.6 = 366.6$

What is 2.35×1.56 ?

2) Find the cube root of 27

3) Work out $10.4 \div 1.3$

4) What is the lowest common multiple of
12 and 18?

5) What is the highest common factor of
12 and 18?

Week 6: Day 2 Answers

1) Given $23.5 \times 15.6 = 366.6$

What is 2.35×1.56 ?

3.666

2) Find the cube root of 27

3

3) Work out $10.4 \div 1.3$

8

4) What is the lowest common multiple of

12 and 18? 36

12, 24, 36, 48, 60, ...

18, 36, 54, 72, 90, ...

5) What is the highest common factor of

12 and 18? 6

1×12

1×18

$2 \times \underline{6}$

2×9

3×4

$3 \times \underline{6}$

Week 6: Day 3

1) Given $23.5 \times 15.6 = 366.6$

What is $366.6 \div 156$?

2) Find the cube root of 1000

3) Work out $37.5 \div 1.5$

4) What is the lowest common multiple of
20 and 35?

5) What is the highest common factor of
20 and 35?

Week 6: Day 3 Answers

- 1) Given $23.5 \times 15.6 = 366.6$

What is $366.6 \div 156$?

2.35

- 2) Find the cube root of 1000

10

- 3) Work out $37.5 \div 1.5$

25

- 4) What is the lowest common multiple of

20 and 35? 140

20, 40, 60, 80, 100, 12, 140, 160, 180, ...

35, 70, 105, 140, 175, 210, ...

- 5) What is the highest common factor of

20 and 35? 5

1 x 20

2 x 10

4 x 5

1 x 35

5 x 7

Week 6: Day 4

1) Given $65.1 \times 22.4 = 1458.24$

What is 6.51×2240 ?

2) Find the cube root of 64

3) Divide 17.7 by 0.3

4) What is the lowest common multiple of
11 and 13?

5) What is the highest common factor of
11 and 13?

Week 6: Day 4 Answers

1) Given $65.1 \times 22.4 = 1458.24$

What is 6.51×2240 ?

14582.4

2) Find the cube root of 64

4

3) Divide 17.7 by 0.3

59

4) What is the lowest common multiple of

11 and 13? 143

11, 22, 33, 44, 55, 66, 77, 88, 99, 110, 121, 132, 143, 154, 165, ...

13, 26, 39, 52, 65, 78, 91, 104, 117, 130, 143, 156, 169, ...

5) What is the highest common factor of

11 and 13? 1

1 \times 11 1 \times 13

Week 6: Day 5

1) **Given**

$$120.2 \times 75.6 = 9087.12$$

What is $908712 \div 120.2$?

2) **Find the cube root of 64000**

3) **What is the result of dividing 43.2 by 0.64?**

4) **What is the lowest common multiple of**

12 and 15?

5) **What is the highest common factor of**

12 and 15?

Week 6: Day 5 Answers

- 1) Given $120.2 \times 75.6 = 9087.12$
What is $908712 \div 120.2$?

7560

- 2) Find the cube root of 64000

40

- 3) What is the result of dividing 43.2 by 0.64?

67.5

- 4) What is the lowest common multiple of
12 and 15? 60

12, 24, 36, 48, 60, 72, 84, ...

15, 30, 45, 60, 75, 90, ...

- 5) What is the highest common factor of
12 and 15? 3

1×12

2×6

3 $\times 4$

1×15

3 $\times 5$

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