



N3

# Number

L3MN

5

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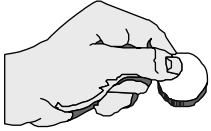
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## Ordering decimal numbers:

Jack measured four lengths of string. They measured 5.23m, 5.27m, 5.28m & 5.21m. Order these lengths of string, from shortest to longest.



Answer: 5.21m, 5.23m, 5.27m & 5.28m



Jenny weighed five coins. They weighed 1.037g, 1.046g, 1.057g, 1.032g, 1.049g & 1.051g. Order these weights from heaviest to lightest.

Answer: 1.057g, 1.051g, 1.049g, 1.046g, 1.037 & 1.032g

## Task 9

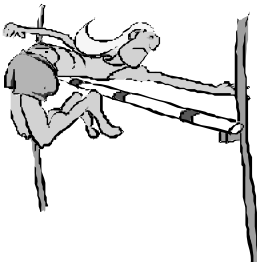
Order these decimals from smallest to largest.

- 2.6, 5.7, 1.9, 8.4, 7.3, 4.9, 6.7, 7.7
- 1.2, 2.4, 1.6, 2.0, 1.8, 0.9, 2.1, 1.9
- 5.7, 5.8, 5.3, 5.6, 5.4, 5.9, 5.1
- 1.08, 1.07, 1.02, 1.06, 1.01, 1.05, 1.09
- 2.34, 2.45, 2.16, 2.75, 2.47, 2.27, 2.54
- 12.56, 13.75, 11.98, 12.84, 13.24, 12.67
- 1.126, 1.352, 1.245, 1.342, 1.049, 1.276, 1.165
- 9.532, 9.842, 9.325, 9.348, 9.428, 9.468

The results of a 100m race is shown in this table.

- What was Shane's time?
- Name the runners who came 1st, 2nd and 3rd.
- Order these times from fastest to slowest time.
- What was the difference between the fastest and slowest time?

Runner	Time (seconds)
David	13.6
Andrew	13.7
Rangi	12.6
John	13.9
Quentin	12.9
Shane	13.0
Bevan	13.4
Sam	14.1



Karen competed in a high jump competition. She was allowed six jumps and these were her results, 1.53m, 1.27m, 1.61m, 1.42m, 1.35m & 1.50m.

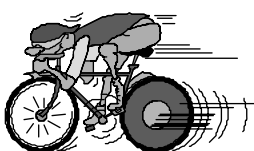
- What was the height of her worst jump?
- What was the height of her 5th jump?
- Place her jump heights in order of highest to lowest jump.
- What was the difference between her best and worst jump?

In a tomato growing competition, pupils were allowed to enter three tomatoes. Each tomato was weighed and the results are shown in this table.

- What was the weight of the heaviest tomato?
- What was the weight of the lightest tomato?
- List all the tomato weights in order from lightest to heaviest.
- For each pupil, add up their three tomato weights.
- List your four totals in order of largest to smallest.



Name	1	2	3
Miri	15.3g	14.7g	12.9g
James	14.8g	13.2g	15.0g
Fred	13.6g	13.9g	14.9g
Kim	16.2g	11.5g	13.4g



In a cycling race, the following times were recorded for the 1 kilometre distance.

1min 5.6sec, 1min 7.2sec, 1min 6.4sec, 1min 7.0sec, 1min 5.9sec, 1min 6.7sec

- List these times in order from slowest to fastest.



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## Creating decimal numbers:

Using the five digits in this box and a decimal point, create the largest number closest to 30.

2	4	5	7	9	°
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Answer: 29.754

Using the same digits and decimal point, create five numbers between 50 and 40, starting with the largest number first. Each number is to have two decimal places.

Answer: 49.75, 49.72, 49.57, 49.52, 49.27, etc.



## Task 10

Using the digits and decimal point in the box make ...

2	6	7	5	0	°
---	---	---	---	---	---

- the 3-digit number closest to 60.
- the 4-digit even number closest to 70.
- the 4-digit even number closest to 250.
- the 2-digit odd number closest to 8.
- the 3-digit odd number closest to 30.
- the 4-digit number closest to 7.
- the 5-digit number closest to 50.
- the 5-digit even number closest to 2.
- the 5-digit odd number closest to 1.
- Using all digits, make the first 5 numbers between 25 and 30. Start with the smallest number first.

## Renaming numbers using decimals:

A good example of renaming whole numbers as decimals is when using money.

Example: \$2.00 could be renamed as \$0.50 + \$0.50 + \$0.50 + \$0.20 + \$0.20 + \$0.10

Renaming whole numbers is not difficult.

Example: 12 could be renamed as  $0 + 12$ ,  $10 + 2$ ,  $14 - 2$ ,  $24 \div 2$ ,  $4 \times 3$  or  $6 \times 2$  etc.



Renaming a number using decimals requires more effort.

Example: 12 could be renamed as  $9.8 + 2.2$ ,  $15.8 - 3.8$ ,  $2.5 \times 4.8$  or  $38.4 \div 3.2$  etc.

Using a calculator can make this task less difficult.

## Task 11

Rewrite each of these money values, **three** different ways, using \$2.00, \$1.00, 50 cent, 20 cent, 10 cent or 5 cent coins. Example:  $\$7.00 = 3 \times \$2.00 + \$1.00$  coins

- |             |             |            |             |
|-------------|-------------|------------|-------------|
| 1. 50 cents | 2. 80 cents | 3. \$1.00  | 4. \$1.50   |
| 5. \$2.00   | 6. \$2.40   | 7. \$3.00  | 8. \$3.60   |
| 9. \$4.80   | 10. \$5.00  | 11. \$6.00 | 12. \$10.00 |

Rename each number **four times** as decimal numbers, using the four operations (+, -, × and ÷).

Use a calculator if needed. Example:  $1 = 0.6 + 0.4$ ,  $1 = 1.52 - 0.52$ ,  $1 = 2.0 \times 0.5$ ,  $1 = 2.64 \div 2.64$

- |        |        |        |         |
|--------|--------|--------|---------|
| 13. 2  | 14. 4  | 15. 5  | 16. 7   |
| 17. 8  | 18. 10 | 19. 12 | 20. 15  |
| 21. 20 | 22. 25 | 23. 50 | 24. 100 |