


PHYSMATH

1: Adding, subtracting, multiplying and dividing




LEARNING OUTCOMES

Level 4
 > Sort numbers based on their values

Level 5
 > Give an example of where each skill would be needed

Level 6
 > Calculate numerical answers using BIDMASS




4 Each set of integers on this page are out of order. Sort them in ascending order in the spaces. **5**

<p>(1) 744, 190, 655, 468, 588, 811</p> <p>(2) 975, 851, 884, 842, 310, 406</p> <p>(3) 119, 243, 491, 421, 206, 730</p> <p>(4) 901, 559, 941, 890, 541, 153</p> <p>(5) 413, 777, 288, 567, 645, 190</p>	<p>(1) 3,239, -2,048, 6,788, -5,662, -8,303, -4,543</p> <p>(2) -4,404, -3,503, 2,501, -1,432, 5,904, -1,149</p> <p>(3) -2,896, -3,241, -1,936, -9,435, -893, 4,735</p> <p>(4) -8,687, -4,555, 6,024, -2,319, 3,836, 6,883</p> <p>(5) 7,465, 4,357, -3,837, -3,222, -8,412, 1,090</p>
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MATH OPERATIONS


Name each of these symbols

×	÷
+	-




▪ Give an example of an everyday situation where you would use each of these symbols

5	<table border="1" style="border-collapse: collapse;"> <tr> <td style="width: 30px; height: 30px;">×</td> <td style="width: 30px; height: 30px;">÷</td> </tr> <tr> <td style="width: 30px; height: 30px;">+</td> <td style="width: 30px; height: 30px;">-</td> </tr> </table>	×	÷	+	-	6
×	÷					
+	-					
4		4				



WHICH SYMBOL IS MISSING?



EQUALS IS THE MOST IMPORTANT SYMBOL IN PHYSICS

- It can only be used when two things are definitely completely equal!
- If two things are almost equal then they are not equal!

WHAT'S THE ANSWER?

$$1) 5 + 99 \div 11$$

Is it 14? Or is it 9.45?

USING MATH IN PHYSICS

- Order of operations
- BIDMAS

BIDMAS STANDS FOR...

- Brackets
- Indices (Don't worry about this one for now)
- Division
- Multiplication
- Addition
- Subtraction

SHOWING YOUR WORKING

- It's important to show all steps in a Physics calculation
- Set your work out like this:

$$\begin{aligned} & 5 + 99 \div 11 \\ & = 5 + 9 \\ & = 14 \end{aligned}$$

- | | | |
|----------------------|-----------------------|-------------------------|
| 1) $5 + 99 \div 11$ | 1) $85 \div 5 + 3$ | 1) $19 + 6 \div (-3)$ |
| 2) $7 \times 6 - 4$ | 2) $42 - 27 \times 5$ | 2) $10 \times (-2) - 8$ |
| 3) $30 \div 5 - 2$ | 3) $6 \times 2 + 1$ | 3) $-2 \times 8 - 14$ |
| 4) $10 + 3 \times 6$ | 4) $70 \div 10 - 12$ | 4) $45 \div 9 + 2$ |
| 5) $9 \times 3 + 8$ | 5) $73 - 9 \times 7$ | 5) $54 - 16 \div 4$ |

4

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