

						27			
91									

Above is a number grid that runs from 1 to 100. The numbers 27 and 91 have been placed on the grid to help you. They do not form part of the set of numbers. The set of numbers that you need to answer the questions about are in the orange boxes.

DO NOT USE A CALCULATOR TO ANSWER THESE QUESTIONS.

- Fill in the numbers that go in the orange boxes.
- What is the total of these numbers?
- What is the maximum of these numbers?
- What is the minimum of these numbers?
- What is the mean average of these numbers?
- What is the range of these numbers?
- What is the median of these numbers?
- What is the product of the highest three numbers?
- What is the quotient of the two lowest numbers?
- The numbers 57, 58, 74, 84, 15, 19 and 32 are added to the set of numbers from the above grid. What is the mode of this larger set of numbers?
- What is the mean average of this larger set of numbers?
- The mathematician wants the mean average to be 64. He is only allowed to change the number 32 while all the other numbers must remain the same. How many must he add or subtract from 32 to make the mean average 64?

×	0	1	2	3	4	5	6	7	8	9	10	11	12
0													
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													

Above is an incomplete multiplication grid. The set of numbers with which we are concerned is the ones that appear in the orange boxes. There are eight of them. Answer the following questions.

DO NOT USE A CALCULATOR TO ANSWER THESE QUESTIONS.

- Fill in the numbers that go in the orange boxes.
- Write the numbers in order starting with the smallest.
- What is the total of these numbers?
- What is the maximum of these numbers?
- What is the minimum of these numbers?
- What is the mean average of these numbers?
- What is the range of these numbers?
- What is the median of these numbers?
- What is the product of the highest three numbers?
- Write down the even numbers from the set.

1	2	3	4	5	6	7
8						14
15						21
22						28
29						35
36						42
43						49
50	51	52	53	54	55	56

Above is an incomplete number grid. The set of numbers with which we are concerned is the ones that appear in the orange boxes. These form our Set A, of which there are five. Answer the following questions.

DO NOT USE A CALCULATOR TO ANSWER THESE QUESTIONS.

1. What is the total of the numbers in Set A?
2. What is unusual about each of the numbers in Set A?
3. What are the mean, median and modal averages of Set A?
4. What is the range of Set A?

×	1	2	3	4	5	6	7
1							
2							
3							
4							
5							
6							
7							

5. Another set of numbers is shown above. Can you explain why none of the second set of numbers is the same as the first set of numbers?
6. Set C is formed from the members of Set A and Set B. (ie **All the numbers in the orange boxes from both grids**). Can you calculate the mean average of Set C?

1 $\frac{9}{20} \times \frac{4}{19} =$

11 $\frac{5}{36} + \frac{10}{29} =$

2 $\frac{14}{29} \div \frac{8}{42} =$

12 $\frac{4}{31} \times \frac{6}{50} =$

3 $\frac{15}{33} \times \frac{17}{41} =$

13 $\frac{9}{17} + \frac{3}{36} =$

4 $\frac{6}{30} \div \frac{16}{52} =$

14 $\frac{8}{32} \div \frac{18}{32} =$

5 $\frac{3}{20} \times \frac{9}{41} =$

15 $\frac{2}{25} \times \frac{13}{22} =$

6 $\frac{14}{25} \times \frac{12}{23} =$

16 $\frac{10}{15} + \frac{15}{41} =$

7 $\frac{7}{20} \div \frac{14}{49} =$

17 $\frac{7}{13} - \frac{5}{22} =$

8 $\frac{14}{24} \times \frac{16}{36} =$

18 $\frac{14}{18} \times \frac{14}{42} =$

9 $\frac{11}{28} \times \frac{12}{20} =$

19 $\frac{2}{31} - \frac{18}{29} =$

10 $\frac{13}{14} \times \frac{13}{47} =$

20 $\frac{2}{17} - \frac{18}{46} =$

DO NOT USE A CALCULATOR WHEN WORKING OUT THESE QUESTIONS. THE IDEA IS TO GIVE YOU PRACTICE IN THE FOUR NUMBER OPERATIONS AND TO REVISE WHAT YOU LEARNED IN YEAR 5.

1 $\frac{11}{34} \times \frac{3}{25} =$

11 $\frac{11}{21} + \frac{11}{26} =$

2 $\frac{15}{20} \div \frac{11}{36} =$

12 $\frac{4}{30} \times \frac{16}{48} =$

3 $\frac{14}{19} \times \frac{9}{36} =$

13 $\frac{7}{37} + \frac{11}{40} =$

4 $\frac{12}{25} \div \frac{8}{22} =$

14 $\frac{7}{18} \div \frac{16}{21} =$

5 $\frac{9}{35} \times \frac{7}{43} =$

15 $\frac{5}{12} \times \frac{11}{38} =$

6 $\frac{6}{16} \times \frac{14}{43} =$

16 $\frac{2}{22} + \frac{16}{24} =$

7 $\frac{5}{14} \div \frac{16}{19} =$

17 $\frac{3}{26} - \frac{18}{28} =$

8 $\frac{6}{37} \times \frac{17}{37} =$

18 $\frac{13}{31} \times \frac{15}{39} =$

9 $\frac{5}{29} \times \frac{13}{34} =$

19 $\frac{9}{36} - \frac{3}{31} =$

10 $\frac{4}{30} \times \frac{15}{46} =$

20 $\frac{15}{33} - \frac{11}{41} =$

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1 $\frac{4}{10} \times \frac{2}{49} =$

11 $\frac{8}{31} + \frac{12}{20} =$

2 $\frac{13}{35} \div \frac{13}{19} =$

12 $\frac{3}{24} \times \frac{7}{36} =$

3 $\frac{11}{27} \times \frac{12}{38} =$

13 $\frac{10}{18} + \frac{3}{51} =$

4 $\frac{15}{20} \div \frac{8}{41} =$

14 $\frac{6}{19} \div \frac{11}{38} =$

5 $\frac{13}{19} \times \frac{5}{25} =$

15 $\frac{7}{30} \times \frac{16}{49} =$

6 $\frac{7}{29} \times \frac{2}{28} =$

16 $\frac{14}{24} + \frac{2}{47} =$

7 $\frac{7}{14} \div \frac{8}{19} =$

17 $\frac{8}{33} - \frac{3}{50} =$

8 $\frac{10}{22} \times \frac{9}{24} =$

18 $\frac{5}{11} \times \frac{11}{50} =$

9 $\frac{6}{30} \times \frac{7}{23} =$

19 $\frac{14}{33} - \frac{18}{50} =$

10 $\frac{12}{19} \times \frac{16}{29} =$

20 $\frac{2}{30} - \frac{7}{35} =$

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1 $4 \frac{7}{17} \times 4 \frac{8}{15} =$

11 $5 \frac{6}{24} \times 1 \frac{3}{19} =$

2 $5 \frac{9}{16} \div 3 \frac{9}{14} =$

12 $9 \frac{11}{21} + 1 \frac{10}{17} =$

3 $7 \frac{5}{18} + 2 \frac{3}{19} =$

13 $10 \frac{10}{21} \times 6 \frac{6}{20} =$

4 $10 \frac{10}{16} \times 2 \frac{3}{23} =$

14 $9 \frac{2}{18} \div 1 \frac{7}{17} =$

5 $9 \frac{5}{16} - 5 \frac{5}{18} =$

15 $3 \frac{5}{16} \times 3 \frac{9}{21} =$

6 $5 \frac{1}{12} \div 4 \frac{3}{13} =$

16 $10 \frac{9}{25} - 1 \frac{4}{18} =$

7 $5 \frac{8}{18} + 8 \frac{10}{21} =$

17 $5 \frac{8}{10} \times 2 \frac{2}{25} =$

8 $6 \frac{5}{21} \times 1 \frac{3}{17} =$

18 $6 \frac{7}{20} \div 8 \frac{4}{20} =$

9 $3 \frac{3}{14} \div 8 \frac{4}{12} =$

19 $9 \frac{9}{15} \times 8 \frac{5}{25} =$

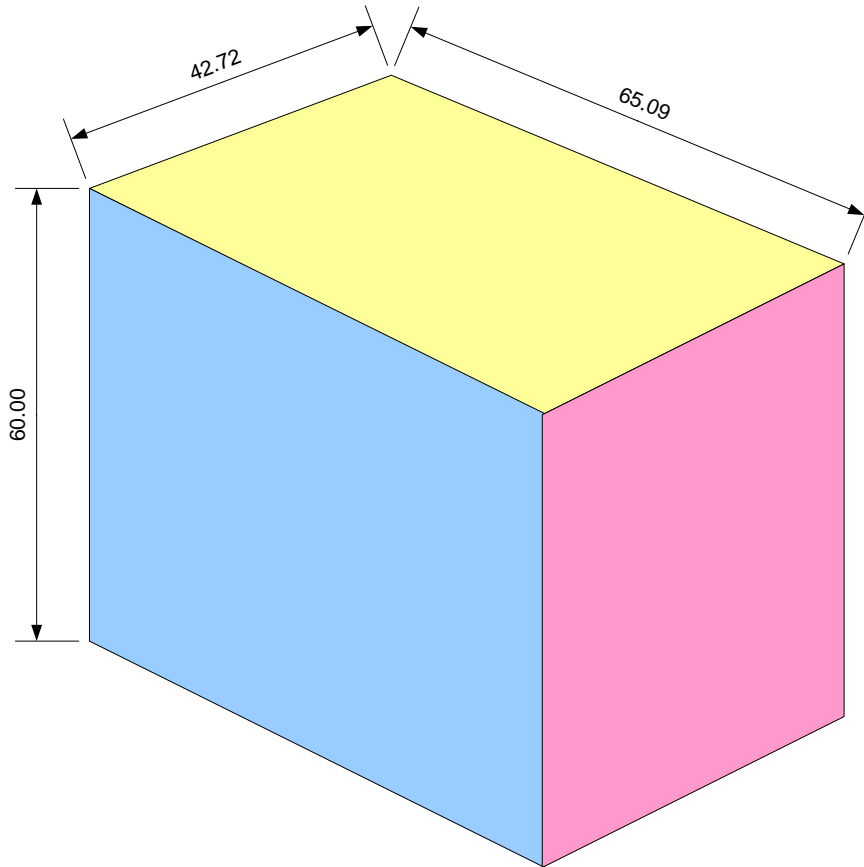
10 $1 \frac{8}{23} - 6 \frac{8}{12} =$

20 $4 \frac{9}{25} \times 5 \frac{1}{10} =$

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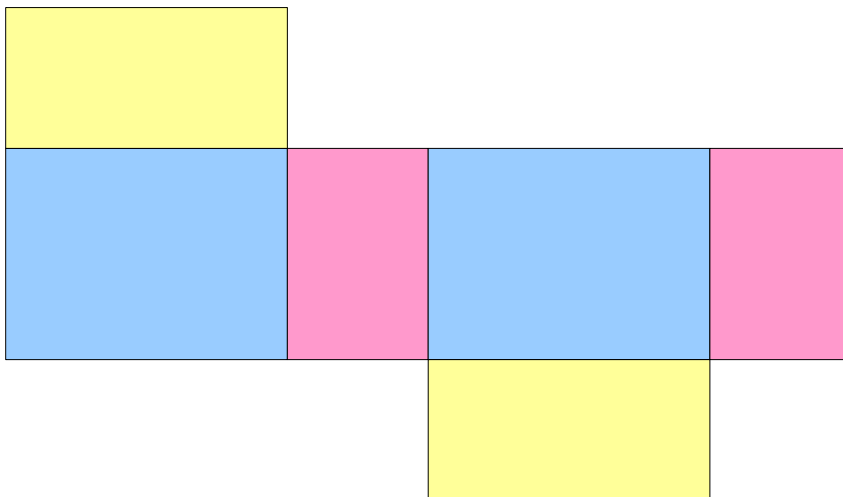
For the shape below, calculate:

1. the length of the edges;
2. the surface area;
3. and the volume.



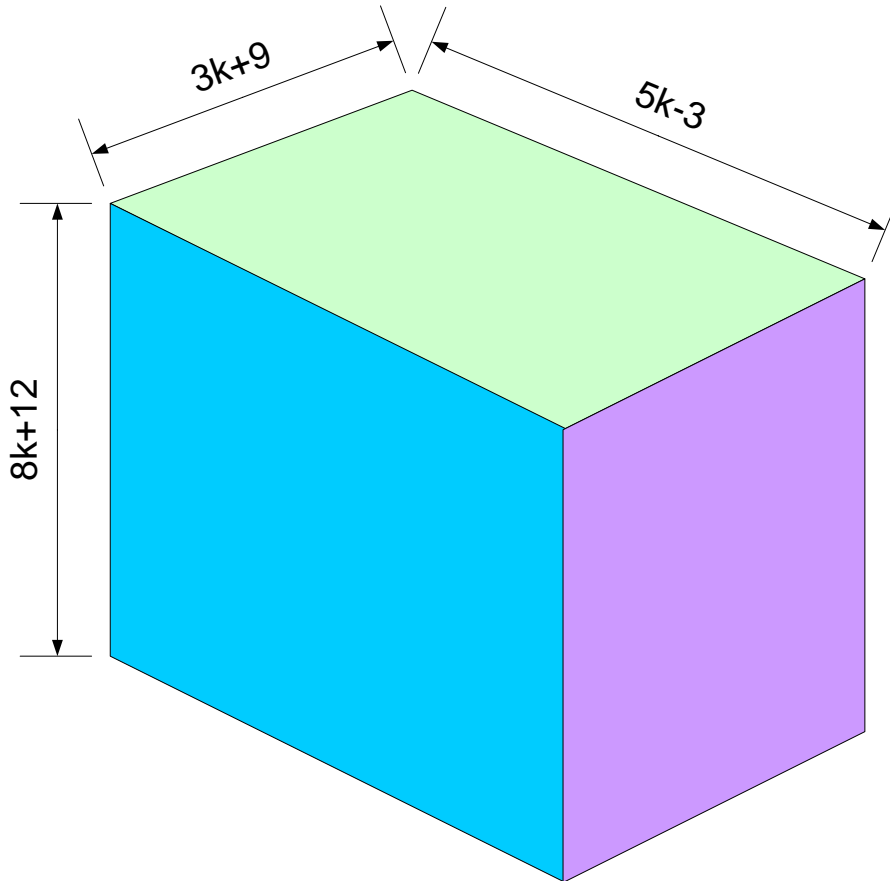
All dimensions are given in metres.

The diagram below is to help you when calculating the surface area.



For the shape below, calculate:

1. the length of the edges;
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All dimensions are given in metres.

The diagram below is to help you when calculating the surface area.

