

# Common multiples



1 Shade all the multiples of 9

Circle all the multiples of 6

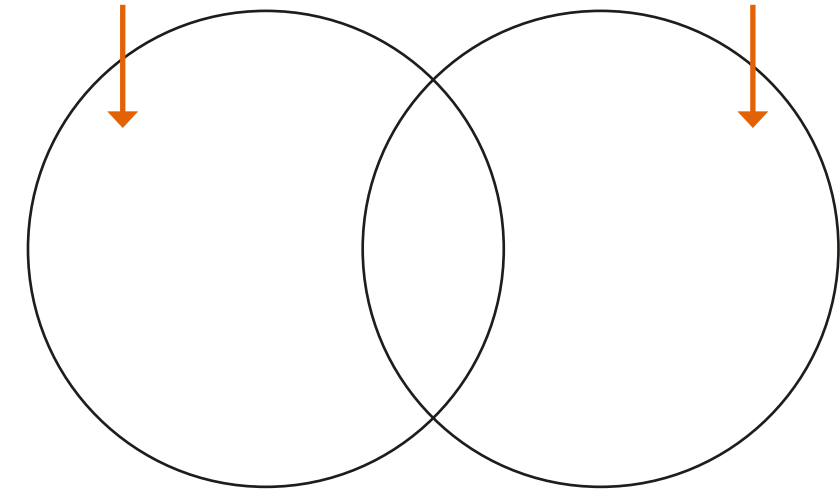
|    |    |    |    |    |    |    |    |    |     |
|----|----|----|----|----|----|----|----|----|-----|
| 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10  |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20  |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30  |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40  |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50  |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60  |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70  |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80  |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90  |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |

List any common multiples of 9 and 6

2 a) Write the numbers in the sorting diagram.

25   30   16   20   24   60   75   40

multiples of 5                      multiples of 4



b) Write all the common multiples of 4 and 5 from the list.

c) Look at the common multiples of 4 and 5 from part b).

What do you notice?

Describe how to find more common multiples to add to this list.

Would you ever run out of common multiples?

3 a) Continue the lists of multiples.

**Multiples of 5**

5, 10, 15, , , , , , ,

, , , ,

**Multiples of 7**

7, 14, 21, , , , , , ,

, , , ,

b) Circle the common multiples of 5 and 7

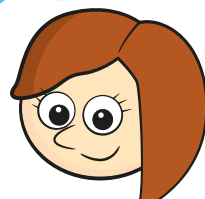
4

I worked out the common multiples of 4 and 6 by multiplying 4 and 6 together to get 24. Then I added on 24 again and again: 24, 48, 72 . . .



Jack

I think your method might miss some common multiples.



Rosie

Who do you agree with and why?

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5

Write the first five common multiples of these numbers.

a) 2 and 3

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b) 3 and 12

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c) 15 and 10

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6

Rita has two grandchildren in different years at school. On Rita's 90th birthday she says to her grandchildren, "My age is a multiple of both your ages today."

How old could Rita's grandchildren be?

Describe two different solutions.

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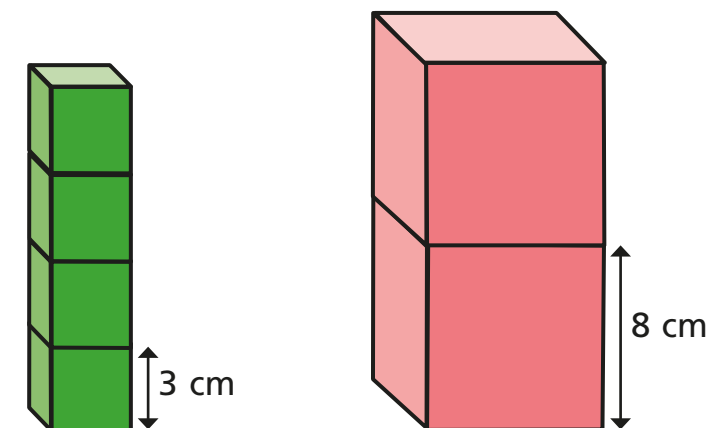


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7



Scott is building a tower from blocks 3 cm tall.

Dora is building a tower from blocks 8 cm tall.

They each build a tower taller than 50 cm, but shorter than 1 m.

The towers are exactly the same height.

How tall could the towers be?

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