a) Use one colour to shade in the first five multiples of 4 and a different colour to shade in the first five multiples of 6 . What common multiple(s) do they have?
b) Before shading in any other multiples, can you use the lowest common multiple to work out another three common multiples of 4 and 6?
c) Now shade in all the multiples of 4 and all the multiples of 6 on the 100 square. List all the remaining common
 multiples of 4 and 6 .
2) Give three common multiples for each pair of numbers.
a)

b)

c)

d)

e)


1) Is Levi correct? Explain your reasoning and use examples to prove it.

The lowest common multiple of two numbers is always the product of those two numbers.

2) For each set of common multiples below, find a pair of numbers for which they could be the common multiples.
a) 12, 24 and 36
c) 21,42 and 63
e) 18,27 and 36
b) 15,30 and 45
d) 10,20 and 30
f) 36,72 and 108

1) In Rose's submarine, the pressure gauge beeps every 3 minutes and the depth gauge beeps every 5
 minutes. How many times in an hour will the two gauges beep at the same time? Provide examples to back up your answer.
2) Rose leads a team of two divers who send reports back to her monitor throughout the day, from 7 a.m. to 1 p.m. Caspar sends his reports back every 12 minutes. Ingrid sends her reports back every 18 minutes. How many times a day will their reports come into the monitor at exactly the same time? Explain your reasoning using examples.

Can you work out all the times that the reports will come in at the same time?
1)
a) Use one colour to shade in the first five multiples of 4 and a different colour to shade in the first five multiples of 6 . What common multiple(s) do they have?
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| 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 | multiples of 4 and 6 .

2) Give three common multiples for each pair of numbers.
a)

b)

c)

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3) Is Levi correct? Explain your reasoning and use examples to prove it.

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