



- 1)
- a) The common multiple is 12.
 - b) Children might suggest 24, 36, 48, 60 or any other common multiple of 4 and 6.
 - c) 24, 36, 48, 60, 72, 84, 96

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

Key:

multiples of 4
multiples of 6
multiples of 4 and 6

- 2)
- a)
15, 30, 45
 - b)
30, 60, 90
 - c)
21, 42, 63
 - d)
10, 20, 30
 - e)
28, 56, 84
 - f)
40, 80, 120

Children may also give other common multiples, formed by finding the product of the two numbers and then finding multiples of this product.

- 1) Levi is incorrect. If the pair of numbers do not share a common factor (other than 1), such as 4 and 7, then their lowest common multiple is their product, as in this example (28). However, if the pair of numbers do share a common factor, such as 4 and 6 (which have a common factor of 2), then their lowest common multiple is not their product. In this case, their lowest common multiple is 12 and their product is 24.



- 2)
- a) 12, 24 and 36
Accept any pair of numbers from 2, 3, 4, 6 or 12.
 - b) 15, 30 and 45
Accept any pair of numbers from 3, 5 or 15.
 - c) 21, 42 and 63
Accept any pair of numbers from 3, 7 or 21.
 - d) 10, 20 and 30
Accept any pair of numbers from 2, 5 or 10.
 - e) 18, 27 and 36
3 and 9
 - f) 36, 72 and 108
Accept any pair of numbers from 2, 3, 4, 6, 9, 12, 18 or 36.

- 1) Common multiples of 3 and 5 are 15, 30, 45 and 60. The two gauges will both beep at these times. Therefore, they will both beep at the same time four times in an hour.
- 2) Common multiples of 12 and 18 are 36, 72, 108, 144, 180, 216, 252, 288, 324 and 360. 360 is equivalent to 6 hours, which is how long the diving sessions last for. Therefore, the reports will come in at the same time 10 times between 7 a.m. and 1 p.m.



These common multiples need converting to times in order to work out when the reports will come in at the same time.

- 7:36 a.m.
- 8:48 a.m.
- 10:00 a.m.
- 11:12 a.m.
- 12:24 p.m.
- 8:12 a.m.
- 9:24 a.m.
- 10:36 a.m.
- 11:48 a.m.
- 1:00 p.m.