

Year 5: Multiples and common multiples: answers

Year 5 - Prime Numbers, Factors, Squares and Cubes - Lesson 3.1

Answers. Final answers to the worksheet questions. Full step-by-step solutions for every question are free at websink.site/ks2-sats/maths/year-5/ch03-factors-primers-squares-cubes/multiples-and-common-multiples/

Exercise 3A Multiples and common multiples

Non-calculator

1 Write the first six multiples of each number.

(a) Multiples of 3

Answer: 3, 6, 9, 12, 15, 18

(b) Multiples of 4

Answer: 4, 8, 12, 16, 20, 24

(c) Multiples of 6

Answer: 6, 12, 18, 24, 30, 36

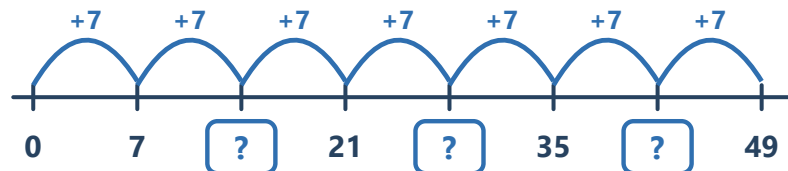
(d) Multiples of 8

Answer: 8, 16, 24, 32, 40, 48

(e) Multiples of 11

Answer: 11, 22, 33, 44, 55, 66

2 Count on in 7s. Write the missing numbers on the number line.



Answer: 14, 28, 42

3 Is each number a multiple of 6? Write Yes or No.

(a) 18

Answer: Yes

(b) 40

Answer: No

(c) 54

Answer: Yes

(d) 72

Answer: Yes

(e) 100

Answer: No

4 Write all the multiples that are between the two numbers.

(a) Multiples of 8 between 30 and 80

Answer: 32, 40, 48, 56, 64, 72

(b) Multiples of 12 between 50 and 100

Answer: 60, 72, 84, 96

(c) Multiples of 15 between 20 and 100

Answer: 30, 45, 60, 75, 90

5 The multiples of 9 are shaded on the hundred square.

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

(a) What is the next shaded number after 63?

Answer: 72

(b) How many numbers on the grid are shaded?

Answer: 11

(c) Is 108 a multiple of 9? (It is not on the grid.)

Answer: Yes

6 Find the lowest common multiple (LCM) of each pair of numbers.

(a) 3 and 5

Answer: 15

(b) 4 and 6

Answer: 12

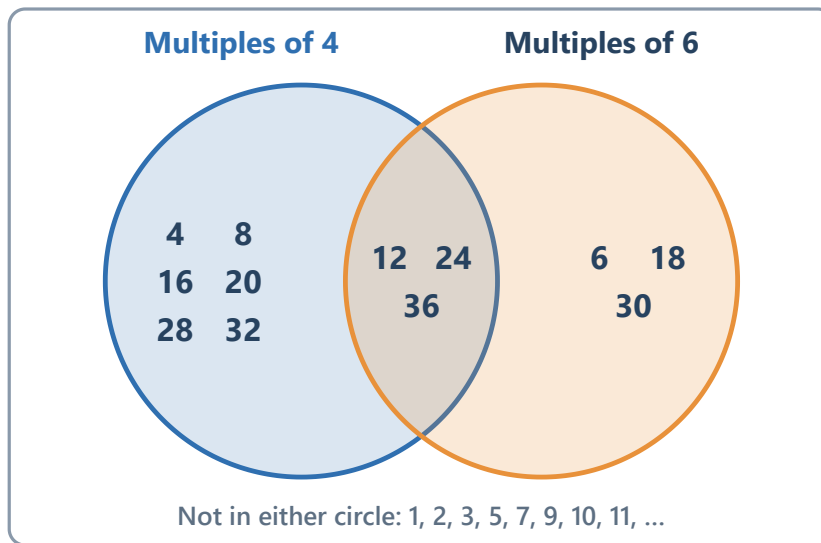
(c) 6 and 9

Answer: 18

(d) 8 and 12

Answer: 24

- 7 The Venn diagram shows the numbers from 1 to 36 that are multiples of 4 or multiples of 6.



- (a) What do the numbers in the middle have in common?

Answer: They are multiples of both 4 and 6

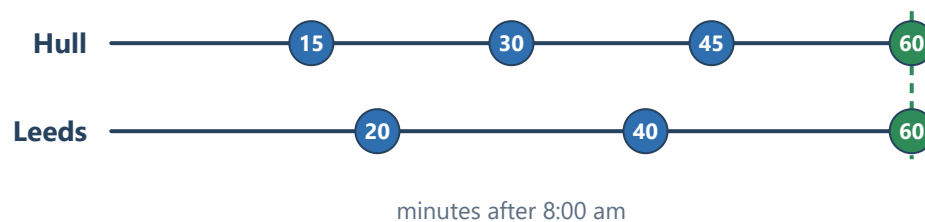
- (b) What is the lowest common multiple of 4 and 6?

Answer: 12

- (c) What is the next common multiple after 36?

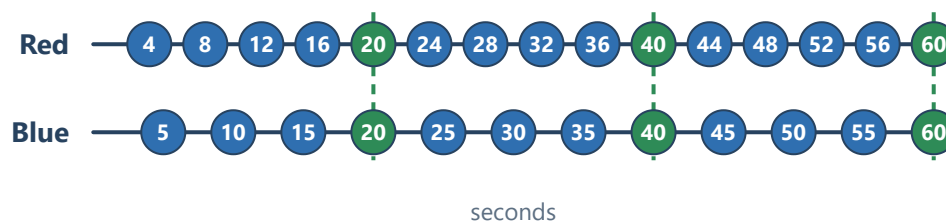
Answer: 48

- 8 The Hull bus leaves a bus station every 15 minutes. The Leeds bus leaves every 20 minutes. Both leave at 8:00 am. At what time do they next leave together?



Answer: 9:00 am

- 9 A red light flashes every 4 seconds. A blue light flashes every 5 seconds. They flash together at the start. At what times in the next 60 seconds do they flash together?



Answer: 20, 40 and 60 seconds

- 10 Leo counts in 8s: 8, 16, 24... He keeps going. Will he say each number?

(a) 120

Answer: Yes

(b) 150

Answer: No

(c) 200

Answer: Yes

11 Zainab writes the first six multiples of 7: 7, 14, 21, 27, 35, 42. One number is wrong. Find it and write the correct number.

Answer: 27 should be 28

12 Always, sometimes or never?

(a) A multiple of 4 is also a multiple of 2.

Answer: Always

(b) A multiple of 3 is an odd number.

Answer: Sometimes

13 Challenge!

(a) I am a multiple of 8 and a multiple of 6. I am between 80 and 100. What number am I?

Answer: 96

(b)

Mia says, "To find the lowest common multiple of two numbers, you just multiply them." Use 6 and 9 to show that Mia is wrong.

Answer: The LCM of 6 and 9 is 18, but $6 \times 9 = 54$