

WA5MNAUN5

Understanding number

Core + Challenge

NAPLAN-style

Multiples

I can find multiples and common multiples by skip counting, and use them to solve problems.

Name: _____ Date: _____ Score: _____ / 57

Key idea

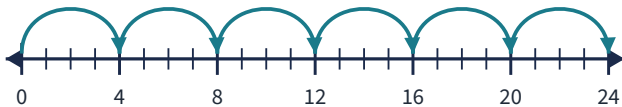
A **multiple** of a number is in its times table. The multiples of 4 are 4, 8, 12, 16, 20, ... They go on **forever**.

A number is a multiple of each of its **factors**: 21 is a multiple of 7, because $7 \times 3 = 21$.

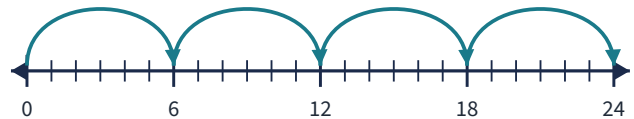
A **common multiple** is in **both** lists. The **lowest common multiple** is the first one.

Example: multiples of 4 are 4, 8, **12**, ... and multiples of 6 are 6, **12**, ... So 12 is the lowest common multiple of 4 and 6.

Jumps of 4



Jumps of 6



A

Warm up *skip count, shade and spot patterns*

/ 16 marks

Continue the jumps along the line. Write the **next three** multiples. 1 mark each.

1 Jumps of 7



2 Jumps of 9



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3 Jumps of 3**4** Jumps of 8Circle **yes** or **no**. 1 mark each.**5** Is 42 a multiple of 6?☐ yes☐ no**6** Is 35 a multiple of 4?☐ yes☐ no**7** Is 54 a multiple of 9?☐ yes☐ no**8** Is 64 a multiple of 6?☐ yes☐ noWrite the **first five** multiples of each number. 1 mark each.**9** Multiples of 11

10 Multiples of 12

11 Multiples of 25

12 Multiples of 15

Each list counts in multiples. Write the missing numbers. 1 mark each.

13 8, 16, , 32, **14** 24, 36, , 60, **15** , 50, 75, **16** 63, , 81, **B** Practise *use the skill*

/ 22 marks

- 1** Sausages come in packs of 6. Bread rolls come in packs of 8. Complete the table. [3 marks]
What is the **smallest** number of packs of each for the **same** number of sausages and rolls?

Packs	1	2	3	4	5	6
Sausages						
Rolls						

Answer:

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- 2 On the hundred chart, **shade** every multiple of **3**. Draw a **ring** around every multiple of **5**. List the numbers that are shaded **and** ringed. What do you notice? [3 marks]

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

Answer: _____

- 3 Two Transperth buses leave the same stop at **7:00 am**. Bus A comes every **12 minutes**. Bus B comes every **15 minutes**. Draw the jumps on the lines. At what time do the buses next leave **together**? [3 marks]

Bus A

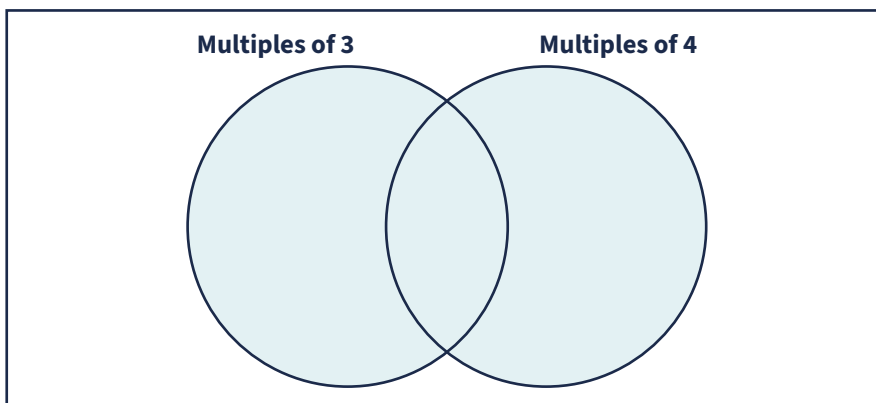


Bus B



Answer: _____

- 4 Write each number in the correct part of the Venn diagram: 9, 12, 16, 18, 20, 24, 30, 35 [2 marks]



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- 5 Circle the number that is a multiple of **both 4 and 5**. Explain how you know. [2 marks]

45

54

60

25

Answer: _____

- 6 A frog jumps **7** at a time from 0. A kangaroo jumps **5** at a time from 0. Draw the frog's jumps. Which number less than 50 do they **both** land on? [2 marks]



Answer: _____

- 7 In **March**, Zoe has netball every **3** days (3rd, 6th, 9th, ...) and swimming every **4** days (4th, 8th, 12th, ...). Ring every netball day and every swimming day. On which dates does she have **both**? [2 marks]

M	T	W	T	F	S	S
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				

Answer: _____

- 8 Eggs come in cartons of **12**. Could you buy exactly **90** eggs? Could you buy exactly **96** eggs? Explain. [2 marks]

Answer: _____

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- 9 Complete the table of multiples of **6** and of **10**. Ring the **common multiples**. [3 marks]

×	1	2	3	4	5	6	7	8	9	10
6										
10										

C Think it through *explain your thinking*

/ 10 marks

- 1 Ella says, “The multiples of 6 are 1, 2, 3 and 6.” Do you agree with Ella? Explain. [2 marks]

- 2 **True or false?** “Every multiple of 6 is also a multiple of 3.” Explain. [2 marks]

- 3 **Always, sometimes or never true?** “A multiple of 5 ends in the digit 5.” Circle one and give examples. [2 marks]

Always / **Sometimes** / **Never**

- 4 Which number is the **odd one out**? 24, 36, 48, 54. Explain. [2 marks]

- 5 Leo says, “The lowest common multiple of 6 and 9 is 54, because $6 \times 9 = 54$.” Do you agree with Leo? Explain. [2 marks]

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D**Challenge** *stretch yourself*

/ 9 marks

- 1** At Rottneest, three lights flash together at midnight. One flashes every **4** seconds, one every **6** seconds and one every **10** seconds. **a)** After how many seconds do all three next flash together? **b)** After midnight, how many times does the 4-second light flash up to **and including** that moment? **c)** After midnight, how many **more** times do all three flash together, up to **and including** 5 minutes after midnight? [3 marks]

Answer: _____

- 2** Find **all** the numbers less than 100 that are multiples of **both 6 and 8**. What do you notice about them? [3 marks]

Answer: _____

- 3** **Mystery number.** I am less than 50. I am a multiple of **7**. When you divide me by 2, by 3 or by 4, there is always **1 left over**. What number am I? Show how you found me. [3 marks]

Answer: _____

How did I go?Warm up ____ / 16 Practise ____ / 22 Think it through ____ / 10 Challenge ____ / 9 **Total ____ / 57**Want help with Year 5 maths? Our tutors make it click. **Book a free trial class at [edulift.com.au](https://www.edulift.com.au)**