

Answer Key — Rounding to 10, 100 & 1,000

Year 4 Mathematics · Number and algebra · WA4MNAPV1

Section A — Fluency (16 marks, 1 mark each)

1. 50
2. 80
3. 350
4. 670
5. 300
6. 700
7. 3,500
8. 6,000
9. 5,000
10. 2,000
11. 18,000
12. 54,000
13. 100
14. 10,000
15. 130,000
16. 700,000

Section B — Core (21 marks)

1. Nearest 10: 2,850. Nearest 100: 2,800. Nearest 1,000: 3,000. [1 mark each]
2. \$69,000. The hundreds digit of 68,742 is 7, which is 5 or more, so we round up to the next thousand. [2 marks correct amount, 2 marks explanation]
3. Any numbers from 350 to 449 round to 400, e.g. 365 and 420. [2 marks for two valid examples, 1 mark for correct range]
4. Nearest 10: 47,380. Nearest 100: 47,400. Nearest 1,000: 47,000. Nearest 10,000: 50,000. [1 mark each]
5. Any number from 7,945 to 7,954 works, e.g. 7,948 — it rounds to 7,950 (nearest 10) because its units digit is 5 or more, and to 8,000 (nearest 1,000) because its hundreds digit is 9. [2 marks valid number, 1 mark explanation]
6. 36,500 is halfway between 36,000 and 37,000. It rounds up to 37,000, because the hundreds digit (5) is 5 or more. [2 marks identifying 36,000/37,000, 2 marks correct rounding with reasoning]

Section C — Reasoning (9 marks) — sample responses, award marks for valid reasoning

1. That digit tells us whether the number is closer to the rounded-down value or the rounded-up value — it's the one that decides which way the number rounds. [2 marks]
2. No, Tom is incorrect. The tens digit of 749 is 4, which is less than 5, so 749 rounds down to 700, not up to 800. He likely looked at the wrong digit (the units digit, 9). [2 marks]
3. 2,500 has a hundreds digit of 5, so it rounds up to 3,000. 2,499 has a hundreds digit of 4, so it rounds down to 2,000. Even though the numbers are close together, they fall on opposite sides of the 5-or-more rule, so they round differently. [2 marks]

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4. Max is correct under the rounding rule used in this worksheet: a units digit of 5 always rounds up, e.g. $25 \rightarrow 30$ and $135 \rightarrow 140$. [2 marks for two valid examples, 1 mark for explanation]

Section D — Challenge (7 marks)

1. 6,500 — it is exactly halfway, and 5-or-more rounds up to 7,000. [2 marks]

2. 7,499 — one more (7,500) would round up to 8,000 instead. [2 marks]

3. 453,000 works: rounded to the nearest 1,000 it's already 453,000 (its thousands digit needs no rounding), and rounded to the nearest 10,000 its thousands digit is 3 (less than 5), so it rounds down to 450,000. Other numbers from 452,500–453,499 also work. [2 marks valid number, 1 mark explanation]