

Who am I? — Up to 3 clues

Name: _____

Date: _____



Use every clue. Show what each one rules out.

- 1 I am a four-digit number. The first two digits add to 6. Its four digits add up to 12. The thousands digit is 6 more than the ones digit.

What number am I?

Why Start with all 9000 four-digit numbers. The first two digits add to 6 → 600 left; Its four digits add up to 12 → 42 left; The thousands digit is 6 more than the ones digit → 1 left. That one is 6060.

6060

- 2 I am a four-digit number. The first two digits add to 9. Its four digits add up to 20. The thousands digit is 7 more than the ones digit.

What number am I?

Why

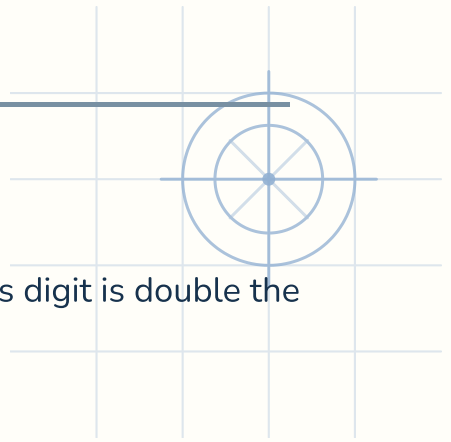
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Use every clue. Show what each one rules out.

- 3 I am a four-digit number. Its four digits multiply to 80. The tens digit is double the hundreds digit. The first two digits add to 9.

What number am I?

Why

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- 4 I am a four-digit number. The thousands digit is 4 more than the ones digit. Its four digits multiply to 378. The first two digits add to 16.

What number am I?

Why

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Who am I? · Up to 3 clues — Answer key

If they are stuck

- Which clue rules out the most numbers? Use that one first.

1. Start with all 9000 four-digit numbers. The first two digits add to 6 $\rightarrow$ 600 left; Its four digits add up to 12 $\rightarrow$ 42 left; The thousands digit is 6 more than the ones digit $\rightarrow$ 1 left. That one is 6060.

3. Start with all 9000 four-digit numbers. Its four digits multiply to 80 $\rightarrow$ 48 left; The tens digit is double the hundreds digit $\rightarrow$ 4 left; The first two digits add to 9 $\rightarrow$ 1 left. That one is 8125.

2. Start with all 9000 four-digit numbers. The first two digits add to 9 $\rightarrow$ 900 left; Its four digits add up to 20 $\rightarrow$ 72 left; The thousands digit is 7 more than the ones digit $\rightarrow$ 1 left. That one is 9092.

4. Start with all 9000 four-digit numbers. The thousands digit is 4 more than the ones digit $\rightarrow$ 600 left; Its four digits multiply to 378 $\rightarrow$ 4 left; The first two digits add to 16 $\rightarrow$ 1 left. That one is 7923.

