1.5 Practice: The Subtraction Principle

1.5 Practice Problem 1

0 points possible (ungraded)

Of all the seven-letter words in the English alphabet, how many have a letter in them that appears more than once? *Choose the best answer.*

- $26 \times 25 \times 24 \times 23 \times 22 \times 21 \times 20$
- $26^7 - 26 \times 25 \times 24 \times 23 \times 22 \times 21 \times 20$
- $26 \times 25 \times 24 \times 23 \times 22 \times 21 \times 20 - 26 \times 25 \times 24 \times 23 \times 22 \times 21$
- $26^7 - 26^6$

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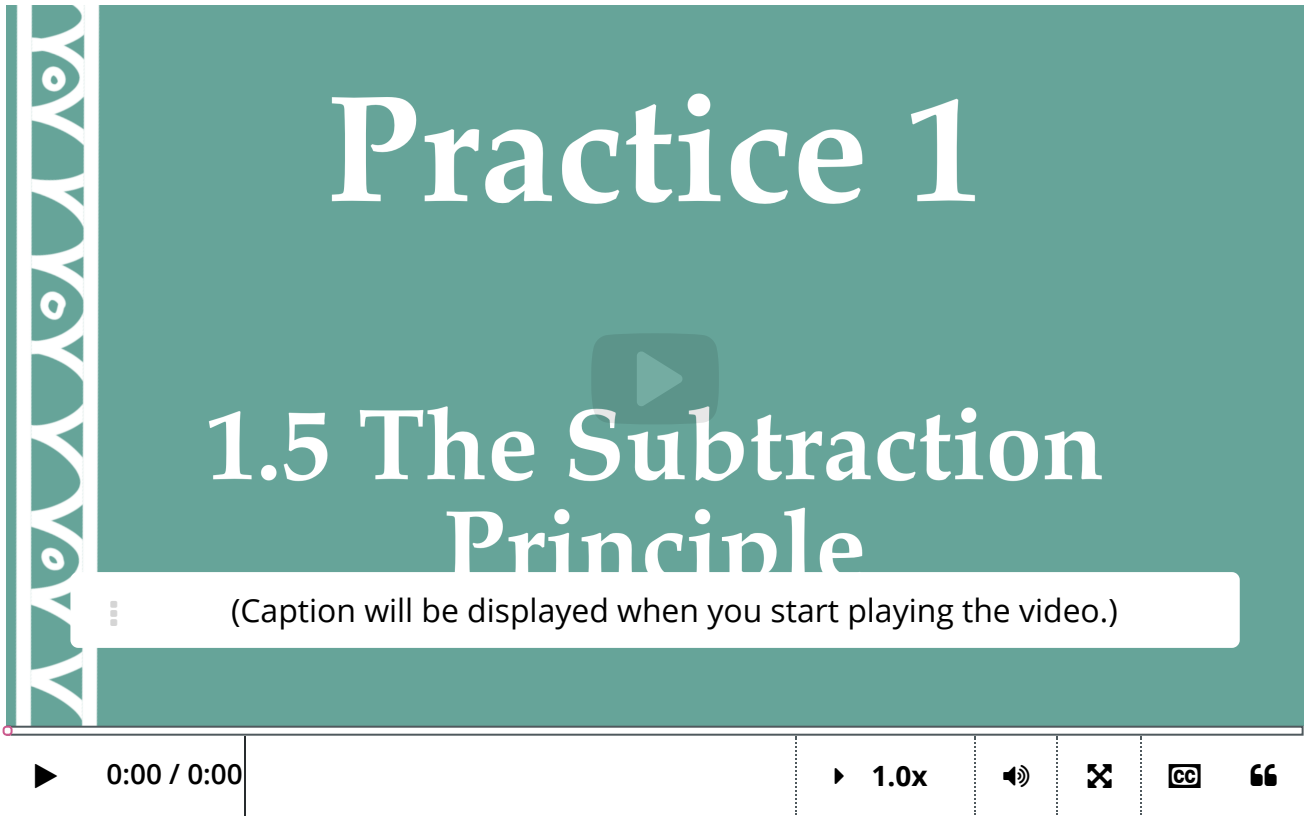
1.5 Office Hours for Practice Problem 1



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1.5 Practice Problem 2.a

0 points possible (ungraded)
A phone number has seven digits and cannot begin with a 0.

How many possible phone numbers are there? *Choose the best answer.*

- 9^7
- $10^7 - 10 \times 9 \times 8 \times 7 \times 6 \times 5$
- $9 \times 9 \times 8 \times 7 \times 6 \times 5 \times 4$

- (●) 9×10^6

✔

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1.5 Practice Problem 2.b

0 points possible (ungraded)

A phone number has seven digits and cannot begin with a 0.

How many phone numbers contain at least one 7? *Choose the best answer.*

- (●) $9 \times 10^6 - 8 \times 9^6$
- ( ) 9×10^5
- ( ) $9 \times 9 \times 8 \times 7 \times 6 \times 5 \times 4 - 9 \times 10^5$
- ( ) 7×10^6

✔

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1.5 Practice Problem 2.c

0 points possible (ungraded)

A phone number has seven digits and cannot begin with a 0.

How many phone numbers contain the sequence 123? *Choose the best answer.*

- ( ) $10^4 + 36 \times 10^3$
- ( ) 5×10^4

$10^4 + 9 \times 10^3$

$10^4 + 36 \times 10^3 - 29$

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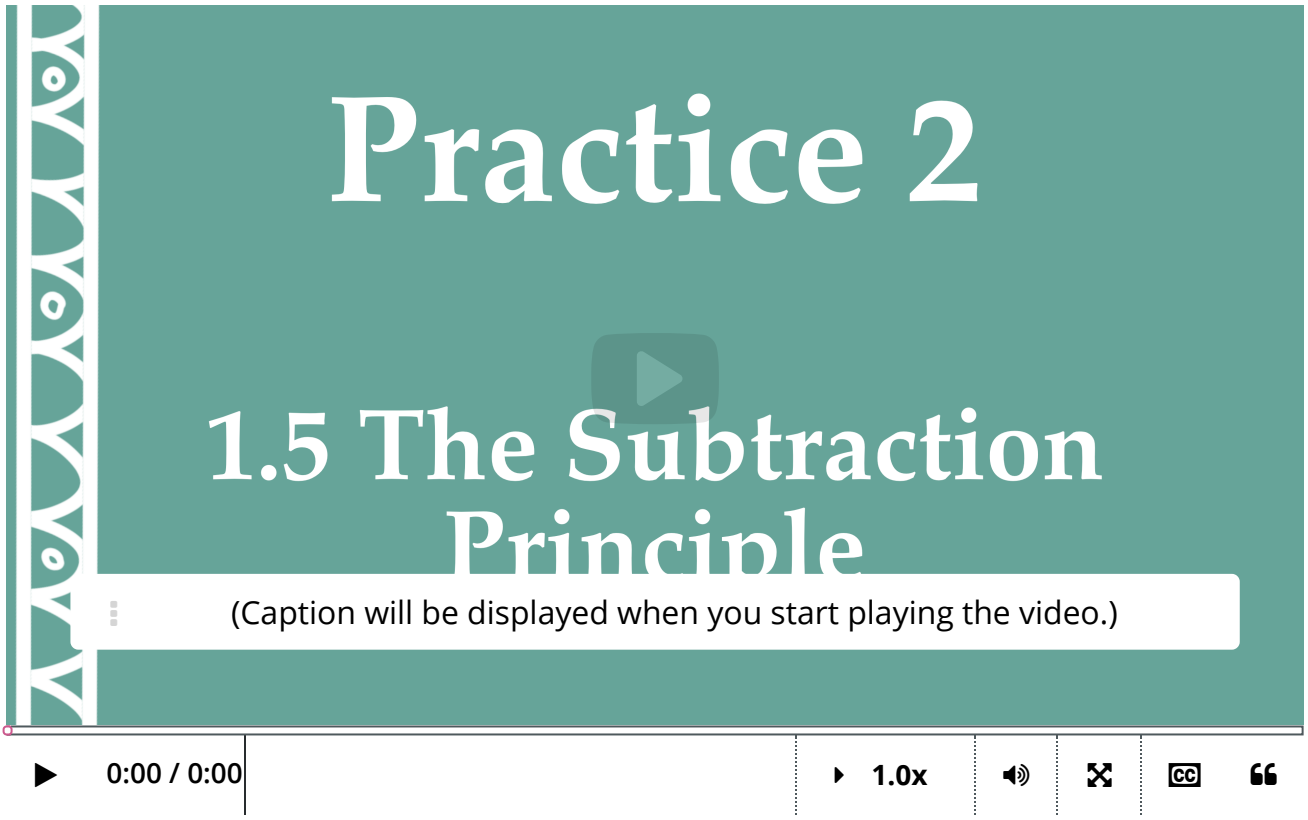
1.5 Office Hours for Practice Problem 2



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