

# CS1800 Fall 2025

Revisit & Practice: How many ways... ?

# Where to start...?

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	<b>Repetition NOT OK</b>	<b>Repetition OK</b>
<b>Order Matters</b>		
<b>Order Doesn't Matter</b>		

# Where to start...?

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	Repetition NOT OK	Repetition OK
Order Matters	<i>1</i>	<i>2</i>
Order Doesn't Matter	<i>3</i>	<i>4</i>

There are 25 players on the Red Sox roster. How many ways to choose 9 starters, if anyone could play any position?

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There are 25 players on the Red Sox roster. How many ways to choose someone for first, second, and third-base?

You have 5 pink socks and 8 orange socks. How many ways to pick two socks?

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How many ways to assign 4 of the 6 CS1800/1802 instructors to 4 different classrooms?

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How many five-card hands have a pair (2 cards the same value; no other pairs/matching)?

How many five-card hands have three-of-a-kind (3 cards the same value; no other pairs/matching)?

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How many ways to arrange the stuffies on the shelves?



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How many ways to split up 10 students into Sec1 with 5 people and Sec 2 with 5 people?



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How many ways to split up 10 students into two groups of 5?

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why is this different?

How many ways to arrange the letters *N O R T H*?



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How many ways to arrange the letters *N O R T H*?



How many ways to arrange the letters *E A S T E R N*?



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