

Algebra II Honors 10 5 Permutation sand Combinations

Lesson 144 | Algebra II | Counting, permutations and combinations

<https://www.youtube.com/watch?v=df5WZ4InSC0>

Original practice aligned to the saved video title.

Name: _____ Date: _____ Show your reasoning.

01

From 13 distinct students choose a team of 3 students. How many teams? How many ordered assignments to the same number of distinct roles?

02

From 19 distinct students choose a team of 2 students. How many teams? How many ordered assignments to the same number of distinct roles?

03

From 18 distinct students choose a team of 4 students. How many teams? How many ordered assignments to the same number of distinct roles?

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Name: _____ Date: _____ Show your reasoning.

04

From 12 distinct students choose a team of 4 students. How many teams? How many ordered assignments to the same number of distinct roles?

05

From 8 distinct students choose a team of 6 students. How many teams? How many ordered assignments to the same number of distinct roles?

06

From 7 distinct students choose a team of 6 students. How many teams? How many ordered assignments to the same number of distinct roles?

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01

From 13 distinct students choose a team of 3 students. How many teams? How many ordered assignments to the same number of distinct roles?

For $m=3$, teams $C(13,m)=286$. Ordered assignments $P(13,m)=1716$; order matters only for roles.

02

From 19 distinct students choose a team of 2 students. How many teams? How many ordered assignments to the same number of distinct roles?

For $m=2$, teams $C(19,m)=171$. Ordered assignments $P(19,m)=342$; order matters only for roles.

03

From 18 distinct students choose a team of 4 students. How many teams? How many ordered assignments to the same number of distinct roles?

For $m=4$, teams $C(18,m)=3060$. Ordered assignments $P(18,m)=73440$; order matters only for roles.

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04

From 12 distinct students choose a team of 4 students. How many teams? How many ordered assignments to the same number of distinct roles?

For $m=4$, teams $C(12,m)=495$. Ordered assignments $P(12,m)=11880$; order matters only for roles.

05

From 8 distinct students choose a team of 6 students. How many teams? How many ordered assignments to the same number of distinct roles?

For $m=6$, teams $C(8,m)=28$. Ordered assignments $P(8,m)=20160$; order matters only for roles.

06

From 7 distinct students choose a team of 6 students. How many teams? How many ordered assignments to the same number of distinct roles?

For $m=6$, teams $C(7,m)=7$. Ordered assignments $P(7,m)=5040$; order matters only for roles.