Lesson 6.6 Practice: Counting: Permutations and Combinations

School Launch · Statistics · Unit 6: Probability · Worksheet A

Calculator / tables

Name _____ Date _____ Score _____ / 10

Show your work under each problem, one step per line, and check your answer. Word problems: name the unknown, write the equation, solve, and answer in a sentence with units.

1. How many ways can 2 of 12 runners be chosen for a relay team (order not important)? EASY

2. How many ways can 3 of 12 runners be chosen for a relay team (order not important)? EASY

3. How many ways can 4 of 12 runners be chosen for a relay team (order not important)? EASY

4. How many ways can 2 of 8 runners finish first, second? MEDIUM

5. How many ways can 4 of 8 runners finish first, second, third …? MEDIUM

6. How many ways can 3 of 11 runners finish first, second, third? MEDIUM

7. How many ways can 2 of 11 runners finish first, second? MEDIUM

8. How many ways can 3 of 10 runners finish first, second, third? HARD

9. How many ways can 4 of 10 runners finish first, second, third …? HARD

10. How many ways can 4 of 5 runners finish first, second, third …? HARD