REVIEW: Combinations

Key Concept and Vocabulary

You can choose 2 out of 4 marbles

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in 6 ways (order does not matter).
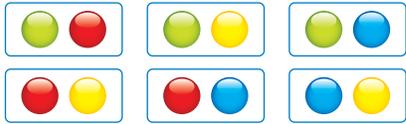
Combination

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🔴🟡 🔴🔵 🔵🟡

Visual Model

Be careful not to double count ways. Order does not matter for combinations.

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🟢🟡 = 🟡🟢   🔴🔵 = 🔵🔴

🟢🔵 = 🔵🟢   🟡🔵 = 🔵🟡
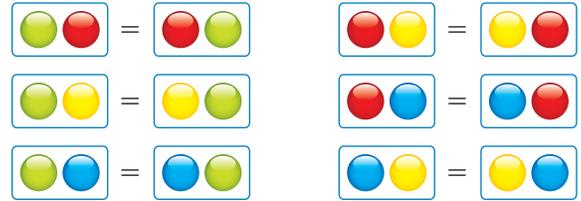
Skill Example

1. You can choose 3 out of 4 marbles

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in 4 ways (order does not matter).

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🟢🟡🔵   🔴🟡🔵

Application Example

2. How many 2-person committees can you form from 5 people?

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🟣🔵 🟣🟢 🔵🩷 🔵🟢 🩷🟢
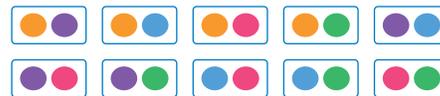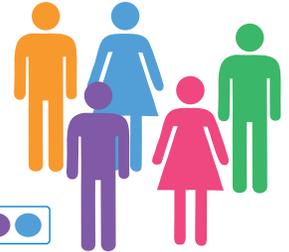
∴ You can form 10 different committees.

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Check your answers at BigIdeasMath.com.

3. FIGURES Draw all the ways that you can choose 2 figures out of 3 figures.   ■ ● ▲

4. COMMITTEES How many 3-person committees can you form from 5 people? *(Draw a sketch for each committee.)* _____   ① ② ③ ④ ⑤

5. PAIRS OF SOCKS How many pairs of socks can you make from 7 identical socks? *(Draw a sketch for each pair.)* _____   ① ② ③ ④ ⑤ ⑥ ⑦

6. RIDING IN AN SUV Eight people want to ride in an SUV that can only hold 7 people. How many groups of 7 people can be chosen from the 8 people? Explain.

_____

_____

_____

Topic 20.4