

REVIEW: Combinations

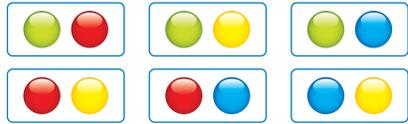
Name _____

Key Concept and Vocabulary

You can choose 2 out of 4 marbles



in 6 ways (order does not matter).

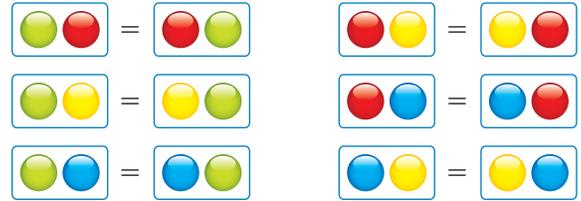


Combination



Visual Model

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



Skill Example

1. You can choose 3 out of 4 marbles

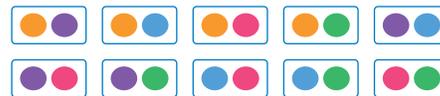
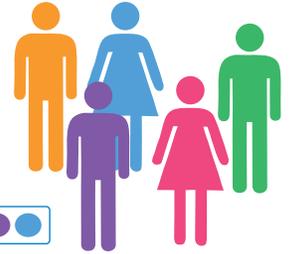


in 4 ways (order does not matter).



Application Example

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



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.) 10



5. **PAIRS OF SOCKS** How many pairs of socks can you make from 7 identical socks? (Draw a sketch for each pair.) 21



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.

8 groups; 1,2,3,4,5,6,7; 1,2,3,4,5,6,8; 1,2,3,4,5,7,8;
1,2,3,4,6,7,8; 1,2,3,5,6,7,8; 1,2,4,5,6,7,8;
1,3,4,5,6,7,8; 2,3,4,5,6,7,8

