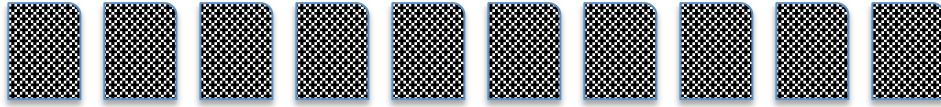


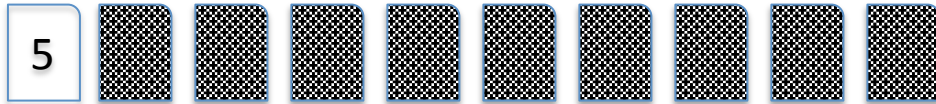
Common Core Circle Card Game Task High School Version

Mrs. Jakeman is teaching her class about compound probability. She has ten cards, numbered 1 to 10, which she mixes up and stands on a shelf turned so that the numbers do not show.



Mrs. Jakeman turns the cards over one at a time.

The first card turned over is a 5:



1. Do you expect the next card to be higher or lower than 5?

Explain why you made this decision:

2. What is the probability that the next card is higher than 5.



The next two cards are an 8 and a 7. What is the probability that the next card will be higher than 5?



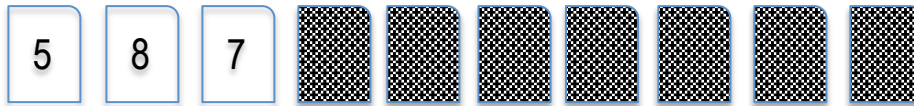
3. When the fourth card is drawn what is the probability that the fifth card has a greater value than the fourth card?

What is the probability that it a lower value than the fourth card?

Explain your reasoning.

Compound Probability of Dependent Events

Common Core Circle Card Game Task High School Version



4. What is the probability of the fourth card being a 2 and the fifth card being a 9?

Show your work:

5. What is the probability of the fourth card being a 6 and the fifth card is higher than the fourth.

Show your work:

6. What is the probability of the fourth card being higher than the third and the fifth being higher than the fourth card?

Show your work:

Compound Probability of Independent Events

Mrs. Jakeman now has two separate decks with cards numbered 1 to 5 each, which she mixes up and stands on a shelf so that some of the numbers are turned down.



What is the probability of the third card in the first group being a 3 and the second card in the second group being a 1? _____

Show your work:

What is the probability of the next card in the first deck being a higher card than the second and the next card in the second deck being a lower card than the first?

Show your work:

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