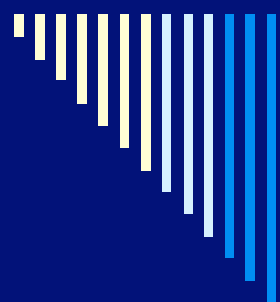


Navigating Through Objective 9 Successfully!

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TAKS Objective 9

The student will demonstrate an understanding of percents, proportional relationships, probability, and statistics in application problems.



TAKS Objective 9

8.3 The student identifies proportional relationships in problem situations and solves problems. The student is expected to:

(B) estimate and find solutions to application problems involving percents and proportional relationships, such as similarity and rates.



TAKS Objective 9

8.11 The student applies the concepts of theoretical and experimental probability to make predictions. The student is expected to:

(A) find the probabilities of compound events (dependent and independent)



TAKS Objective 9

8.11 The student applies the concepts of theoretical and experimental probability to make predictions. The student is expected to:

- (B) use theoretical probabilities and experimental results to make predictions and decisions
-



TAKS Objective 9

**8.12 The student uses statistical procedures to describe data.
The student is expected to:**

(A) select the appropriate measure of central tendency to describe a set of data for a particular purpose



TAKS Objective 9

**8.12 The student uses statistical procedures to describe data.
The student is expected to:**

(C) construct circle graphs, bar graphs, and histograms, with and without technology



TAKS Objective 9

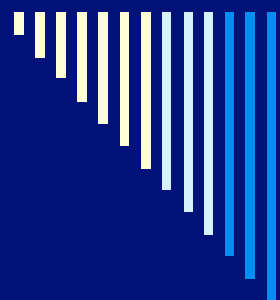
8.13 The student evaluates predictions and conclusions based on statistical data. The student is expected to:

(B) recognize misuses of graphical or numerical information and evaluate predictions and conclusions based on data analysis



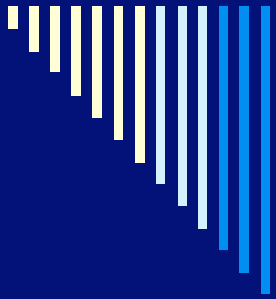
Algebra 1 and Algebra 2

- Connections to:
 - Proportionality
 - Predictions
 - Percent
-



Geometry

- Connections to:
 - Probability
 - Percent
 - Proportionality

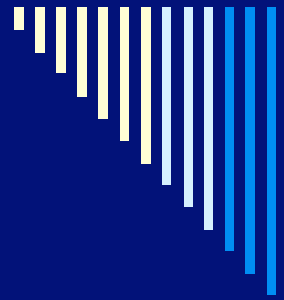


3 V's

Vocabulary

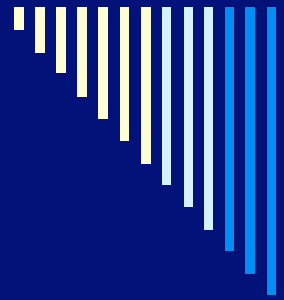
Visualize

Vocalize



Vocabulary





Visualize

Independent events

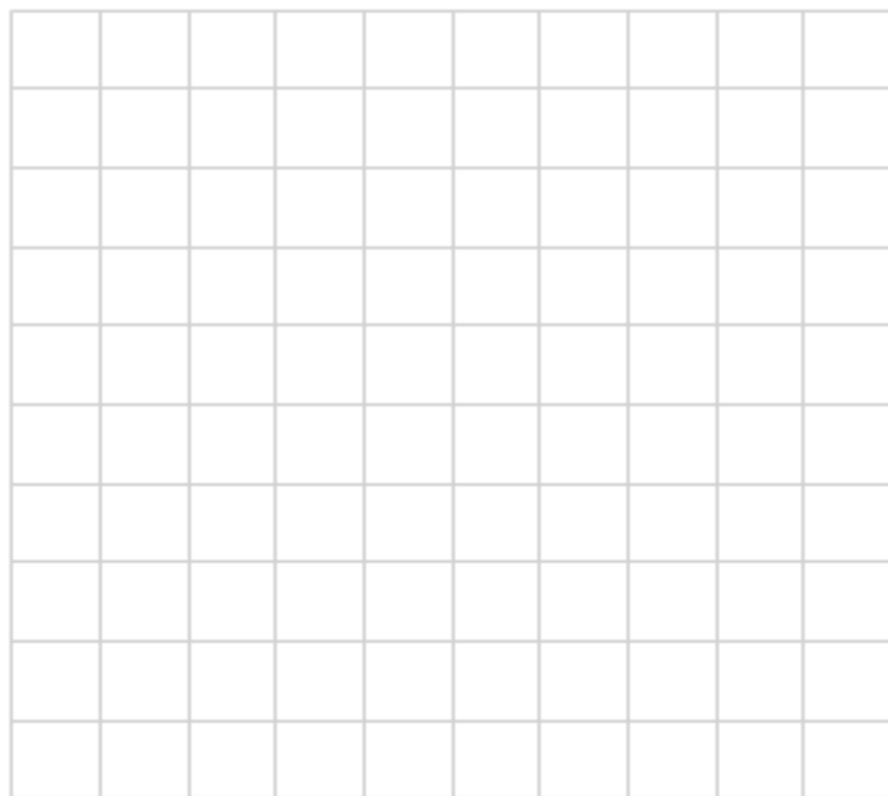
Using a Venn diagram to sort people or objects according to particular attributes can be a great tool to use. Let's keep going through the game booths. Steven and Doug are at the basketball-shooting booth. The winner here is the one who gets the ball through the hoop two times in a row. The player shoots only twice so if he misses the first shot, he loses the game.



Both boys are fairly good players. Based on past performance, Steven makes his shot 60% of the time while Doug is a 50% shooter. These represent the experimental probabilities for each player making his shot. Examine the animation on the next screen to see how to predict ahead of time the likelihood of the boys winning this game.

Independent events

◀ 1 2 3 4 5 6 7 8 9 10 ▶



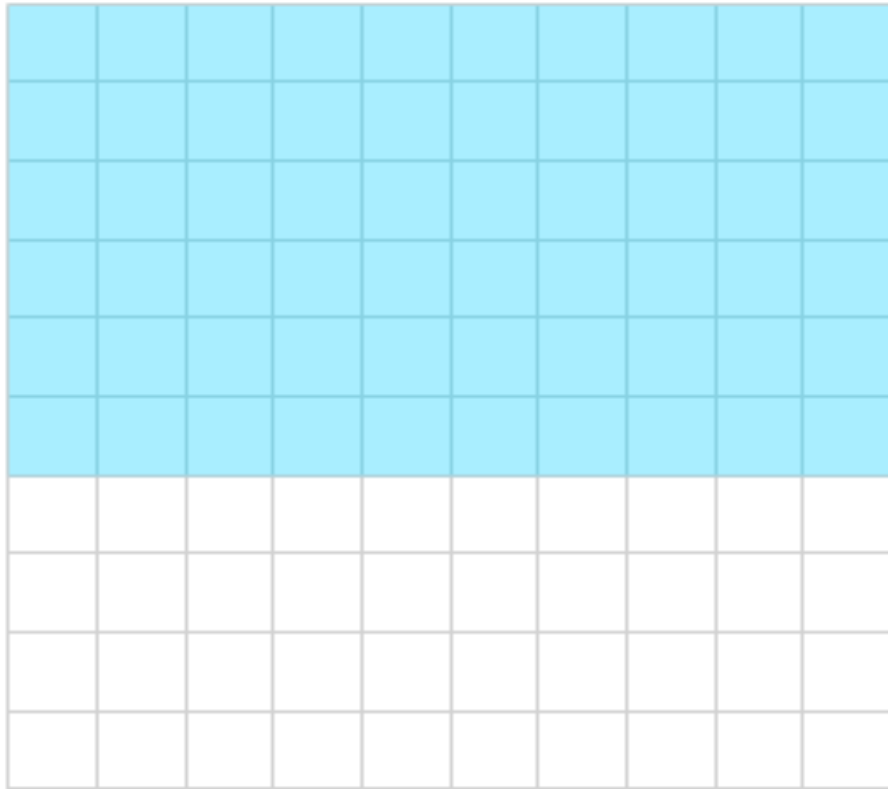
1 2 3 4



The probability of Steven making his first shot is 60%.

Independent events

◀ 1 2 3 4 5 6 7 8 9 10 ▶

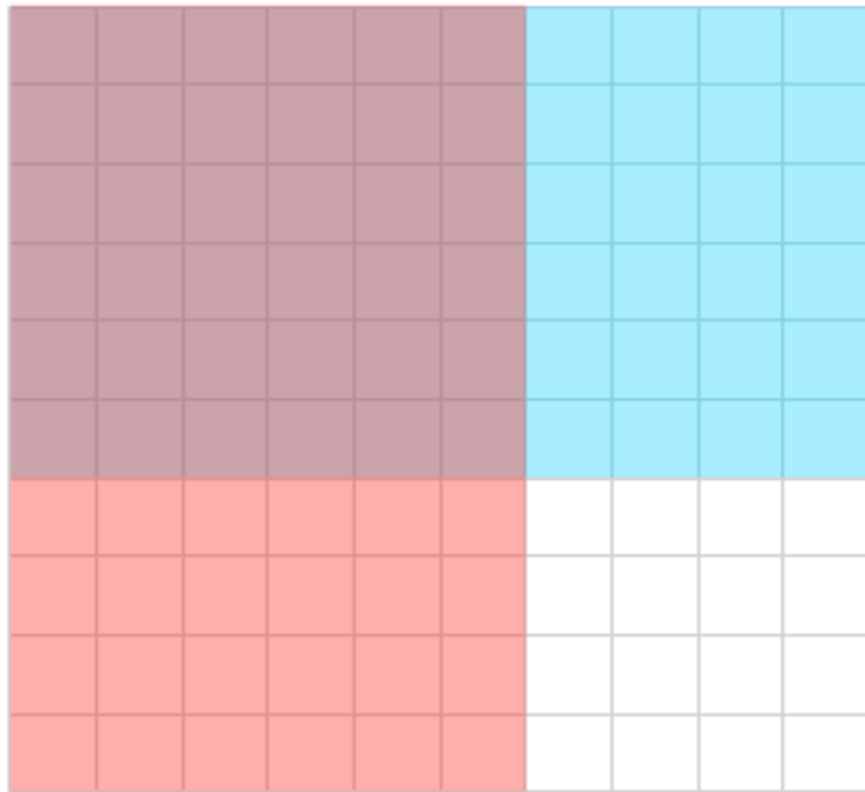


1 2 3 4



The probability of Steven making his first shot is 60%. 60% of the squares are shaded.

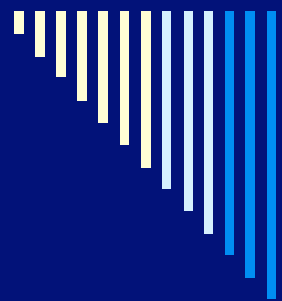
Independent events



1 2 3 4



The squares shaded in red show that the probability of Steven making the second shot is 60%. The squares that are shaded in both red and blue show the probability of Steven making both the first and second shot. What percent of the total area is shaded by both colors?



Vocalize

