

Probability & Statistics

Scorer	CU	PS	V	C	Acc

Name _____

Date _____

Teacher _____

Exceeds
 Meets
 Does Not Yet Meet
 On-Demand
 Revised/Redone
 Modified

Comments: _____

Dan's Scores

Dan has taken several spelling tests this term. His scores were 76, 76, 86, 90 and 97. Dan's teacher told Dan he could report his "average" score for the term using the mode, mean or median. Which of these three should Dan use to report the highest "average" score? Explain your thinking.

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(Probability/Statistics)

Marbles

A bag contains two yellow marbles, four blue marbles and six red marbles. How many marbles must be added to the bag to make the probability of drawing a blue marble equal to $1/2$?

Explain your answer(s) and your thinking.

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Looking for a 7

Tom has a pair of six-sided dice. He needs to roll a total of 7, by adding both dice to win the game. What are his chances of getting a seven on the first roll?

Explain your answer(s) and your thinking.

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Money Averaging

Mark has 5 coins. The average value of the coins is \$0.14. What coins might he have?

Explain your answer(s) and your thinking.

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The Oldest Teachers

Mrs. Bowen, principal at Sweetridge Elementary School, claims the teachers at her school are, on average, younger than the teachers at Mr. Radwell's school. Mr. Radwell, principal at Sugar Valley Elementary School, disagrees and says his teachers are, on average, younger than the teachers at Sweetridge. Using the data below to find the mean average age of teachers at each school, determine who is right in this friendly argument. Explain your thinking.

Sweetridge School	Sugar Valley School
47 years	52 years
24 years	55 years
51 years	25 years
38 years	27 years
31 years	33 years
	31 years
	29 years
	30 years

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Rainy Days

Heidi kept track of the weather in Troutdale during the month of November (30 days). At the end of the month she discovered that $\frac{1}{6}$ of the month was sunny, $\frac{1}{5}$ of the days were partly overcast and $\frac{1}{3}$ of the days had been cloudy and dry. The rest of the days were cloudy and rainy. How many days did it rain during the month of November? Explain your answer and your thinking.

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Run!

Three friends run an average (mean) of 9 miles a day. Paul ran 7 miles, Sally ran 12 miles. How far did Jonathan run?

Explain your answer(s) and your thinking.

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He Ain't Heavy, He's My Bear

The data below gives the weights of some female grizzly bears and female black bears living in the Rocky Mountains of Montana. Based on this data, how much heavier is an average female bear of one kind than an average female bear of the other kind?

Grizzly Bears		Black Bears	
Name	Weight	Name	Weight
Sue	270 kg	Blackberry	120 kg
Linda	286 kg	Greta	110 kg
Wilma	260 kg	Hilda	115 kg
Glenda	272 kg	Blackfoot	110 kg
		Marcy	120 kg

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Beach Trip

Five families went to the beach for the day. For the nine children, the average (mean) age was 8. The ages of eight of the children were 15, 2, 7, 3, 8, 13, 3 and 8. What is the “missing” age?

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Mystery Spinner

Ms. Newton's class is divided into the girls and the boys. Each group made 40 random spins with the circle spinner having four colors; red, blue, green and yellow. They graphed their results below. Examine the data and draw the spinner the class most likely used. Be certain to explain why the spinner is divided the way it is.

Color	Girls	Boys
Blue	11	9
Red	19	23
Green	7	3
Yellow	3	5

Explain your answer(s) and your thinking.

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The Big Game

In his first 4 games, Dunking Dan Dorfman scored 19, 31, 12 and 9 points. How many points must he score in his fifth game to have an average of exactly 20 points per game?

Explain your answer(s) and your thinking.

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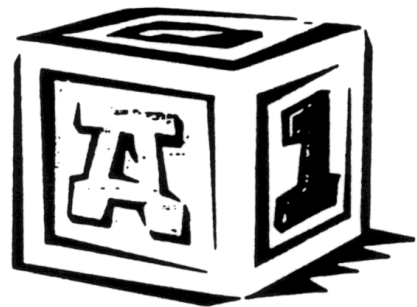
Alphabet Blocks

The six sides of this cube have a different letter or number: A, E, D, 4, 1 or 2. Suppose you toss the cube and note which letter or number comes out on top.

What is the probability that the symbol on top is D? _____

What is the probability that the symbol on top is an even number? _____

Explain your answer(s) and your thinking.



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Soccer Tournament

Westwood soccer league has a single elimination tournament on Saturday. There are 8 teams. How many games will the winning team play? How many games will be played in all?

Explain your answer(s) and your thinking.