

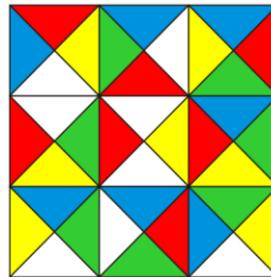
8A.1 Learning Opportunity

Name: _____

Probability and Odds

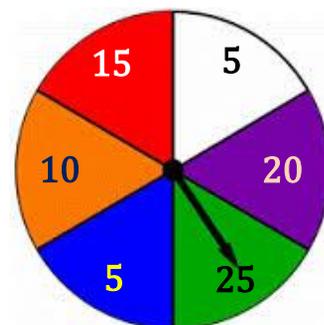


For problems 1 through 3 assume that a dart is thrown at the square target shown and lands somewhere on the target.



- 1) What is the probability that the dart will land on a white section of the target?
- 2) What is the probability that the dart will land on a section of the target that is not white?
- 3) What are the odds of landing a dart on a blue or yellow section of the target?

Use the fair spinner shown to answer questions 4-7

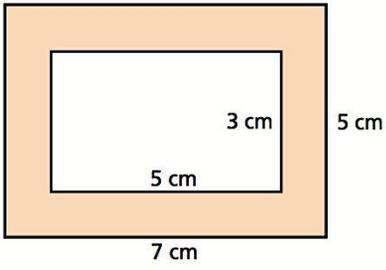


- 4) What is the probability of spinning a 5?
- 5) What is the probability of spinning anything other than a 5?
- 6) What is the odds of spinning a multiple of 10?
- 7) What are the odds of spinning the GCF of 10 and 25?
- 8) There are 8 marbles in a bag. These include red, blue, and green marbles. The probability of drawing a red marble is equal to the probability of drawing a green marble. There are more red marbles than blue marbles in the bag. How many marbles of each color are in the bag?

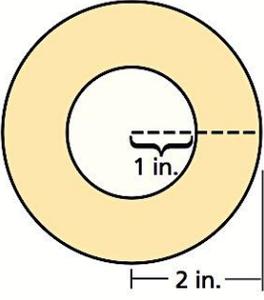
9) A bag of fruit chews contains 2 cherry chews, 3 lemon chews, and 1 orange chew.

How many cherry chews must be added to the bag so that the probability of choosing a cherry chew is $\frac{1}{2}$?

10) If a raindrop lands on the figure shown, what is the probability that it will **not** land on the shaded region?



11) If a raindrop lands on the figure shown, what are the odds that it will land on the shaded region?



12) Refer to the data on the world's tallest buildings below. Suppose the names of the ten tallest buildings are put into a hat and one name is drawn randomly. Expressed as a percent, what is the probability that the building drawn is 100 or more stories tall?



New York, NY

The 10 Tallest Buildings in the World

Building	Location	Stories	Height of Building		Year Completed
			feet	meters	
Taipei 101	Taipei, Taiwan	101	1667	508	2004
Petronas Tower I	Kuala, Lumpur, Malaysia	88	1483	452	1998
Petronas Tower II	Kuala, Lumpur, Malaysia	88	1483	452	1998
Sears Tower	Chicago, IL, U.S.	110	1450	442	1974
Jin Mao Building	Shanghai, China	88	1381	421	1999
Two International Finance Center	Hong Kong, China	88	1352	412	2003
CITIC Plaza	Guangzhou, China	80	1283	391	1996
Shun Hing Square	Shenzhen, China	69	1260	384	1996
Empire State Building	New York, NY, U.S.	102	1250	381	1931
Central Plaza	Hong Kong, China	78	1227	374	1992