math Antics Worksheets

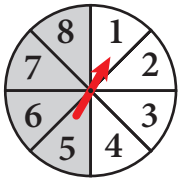
Name: _____

Date: _____

Basic Probability as Fractions

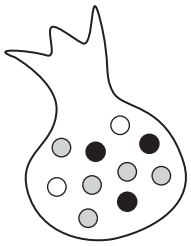
A-BP 1

Instructions: Use this spinner to answer the following questions: (Use fraction form to express the probabilities and simplify if possible.)



1. What is the probability of spinning a 1? $\frac{1}{8}$
2. What is the probability of spinning a 1 or a 2? $\frac{2}{8}$ or $\frac{1}{4}$
3. What is the probability of spinning a 6? $\frac{1}{8}$
4. What is the probability of spinning a white sector? $\frac{4}{8}$ or $\frac{1}{2}$
5. What is the probability of spinning a 10? $\frac{0}{8}$ or 0
6. What is the probability of spinning an even number? $\frac{4}{8}$ or $\frac{1}{2}$
7. What is the probability of spinning a grey sector? $\frac{4}{8}$ or $\frac{1}{2}$
8. What is the probability of spinning a number greater than 5? $\frac{3}{8}$

Instructions: Use this bag of 10 marbles to answer the following questions: (Use fraction form to express the probabilities and simplify if possible.)



If you randomly select a marble...

9. What is the probability that it will be black? $\frac{3}{10}$
10. What is the probability that it will be grey? $\frac{5}{10}$ or $\frac{1}{2}$
11. What is the probability that it will be white? $\frac{2}{10}$ or $\frac{1}{5}$
12. What is the probability that it will be green? $\frac{0}{10}$ or 0
13. What is the probability that it will be black or white? $\frac{5}{10}$ or $\frac{1}{2}$
14. What is the probability that it will be black or grey? $\frac{8}{10}$ or $\frac{4}{5}$
15. What is the probability that it will be white or grey? $\frac{7}{10}$
16. What is the probability that it will not be green? $\frac{10}{10}$ or 1

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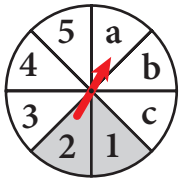
Basic Probability as Fractions, Decimals and Percents

A-BP 2

Instructions: Use this spinner to answer the following questions:
(You can use a calculator to get the decimal values if you need to.)



		fraction	decimal	percentage
1	What is the probability of spinning a number?	5/8	0.625	62.5%
2	What is the probability of spinning a letter?	3/8	0.375	37.5%
3	What is the probability of spinning a 'b'?	1/8	0.125	12.5%
4	What is the probability of spinning a grey sector?	2/8 or 1/4	0.25	25%
5	What is the probability of spinning a white sector?	6/8 or 3/4	0.75	75%
6	What is the probability of spinning a number less than 5?	4/8 or 1/2	0.5	50%
7	What is the probability of spinning a number or a letter?	8/8 or 1	1.0	100%
8	What is the probability of spinning a 6?	0/8	0.0	0%
9	What is the probability of spinning a white sector or a 2?	7/8	0.875	87.5%

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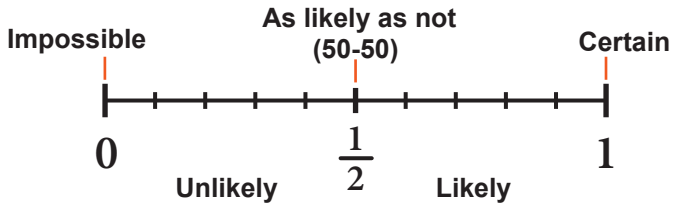
Likely or Unlikely? Etc.

A-BP 3

Instructions: For each question below, tell if the event described would be "impossible", "unlikely", "as likely as not" (you can write "50-50"), "likely" or "certain".



1 What is the probability of flipping "heads" in a fair coin toss?

as likely as not (or 50-50)

2 If the weather report says there is a 100% chance of rain in the afternoon, it means that rain is...

certain

3 A bag of marbles contains 10 red, 5 green and 7 blue marbles. How would you describe the probability of randomly choosing a yellow marble from the bag?

impossible

4 On a multiple choice question, if there are 5 possible answers, getting the right answer by a completely random guess would be...

unlikely

5 If a music playlist contains 8 songs you like and 2 you don't, randomly playing a song that you like is...

likely

6 Rolling a 6 on a standard 6-sided die is considered...

unlikely

7 Rolling an even number on a standard 6-sided die would be...

as likely as not (or 50-50)

8 If the weather report says there is a 20% chance of snow, that would be considered...

unlikely

9 If a bag of marbles contains 10 blue, 4 yellow and 4 red marbles, randomly choosing a blue marble would be...

likely

10 If an assorted box of chocolates contains 20 different kinds, and you like all of them, what is the probability that you will randomly select one that you like?

certain

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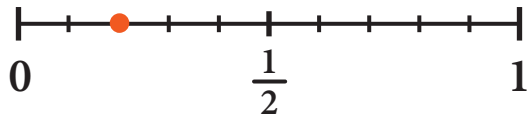
The Probability Line

A-BP 4

Instructions: Answer the following probability questions using both fraction and decimal form. (You can use a calculator to get the decimal form if you need to.) Then plot the probabilities on the Probability Line.

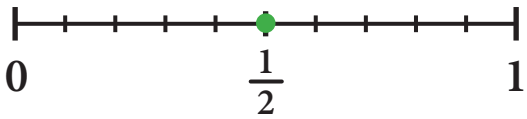
1 A spinner has 5 equally sized sectors numbered 1 thru 5. What is the probability of spinning a 2?

$\frac{1}{5}$ fraction 0.2 decimal



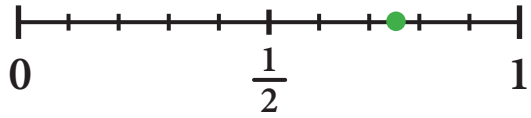
2 What is the probability of rolling an even number on a standard 6-sided die?

$\frac{3}{6}$ or $\frac{1}{2}$ fraction 0.5 decimal



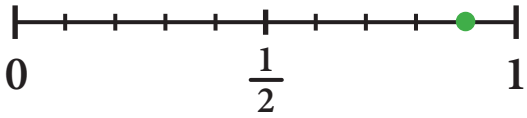
3 A bag contains 20 marbles. 5 are blue and the rest are red. What is the probability of randomly choosing a red marble?

$\frac{15}{20}$ or $\frac{3}{4}$ fraction 0.75 decimal



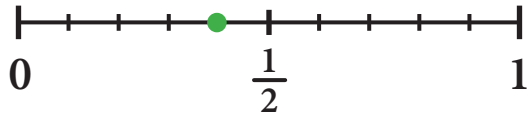
4 A spinner has 10 equally sized sectors numbered 1 thru 10. What is the probability of spinning a number that's greater than 1?

$\frac{9}{10}$ fraction 0.9 decimal



5 A box of popsicles contains 3 cherry, 3 grape and 4 orange. What is the probability of randomly choosing orange?

$\frac{4}{10}$ fraction 0.4 decimal



6 A box of 12 chocolates has 3 pieces that contain nuts. If you choose at random, what is the is probability of getting a piece with nuts?

$\frac{3}{12}$ or $\frac{1}{4}$ fraction 0.25 decimal