

# Probability Worksheet

## The Odds Are Good, But the Goods Are Odd

A die has six sides with numbers 1 - 6.

1. What is the probability of rolling a die and getting a 6?  
 $\frac{1}{6}$
2. What is the probability of rolling a die and getting an odd number?  
 $\frac{3}{6} = \frac{1}{2}$
3. What is the probability of rolling two dice and getting a 6?  
 $2 \times \frac{1}{6} = \frac{1}{3}$
4. What is the probability of rolling two dice and getting two 6s?  
 $\frac{1}{6} \times \frac{1}{6} = \frac{1}{36}$
5. What is the probability of rolling a die and getting a 5 or a 3?  
 $\frac{2}{6} = \frac{1}{3}$
6. What is the probability of rolling three dice and getting three 6s?  
 $\frac{1}{6} \times \frac{1}{6} \times \frac{1}{6} = \frac{1}{216}$
7. What is the probability of rolling three dice and getting three 6s or three 5s?  
 $\frac{1}{216} + \frac{1}{216} = \frac{1}{108}$
8. What is the probability of rolling three dice and getting three 6s, three 5s, or three 4s?  
 $\frac{1}{216} + \frac{1}{216} + \frac{1}{216} = \frac{3}{216} = \frac{1}{72}$
9. What is the probability of rolling three dice and getting three 3s or three 2s or three 1s?  
 $\frac{1}{216} + \frac{1}{216} + \frac{1}{216} = \frac{3}{216} = \frac{1}{72}$
10. What is probability of rolling three dice and getting three of a kind?  
 $\frac{6}{216} = \frac{1}{36}$

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