

Problem Solving

Complete the sample space below to show all the possible outcomes of rolling a blue die and a black die. Then use the sample space to solve each problem. Write each probability in simplest form.

Blue Die

| | | I | 12 | 3 | 4. | 5 | 6 |
|-----------|-----|-----|-----|-----|-----|-------|---|
| Black Die | 18 | 1,1 | 2,1 | 3,1 | 4,1 | | |
| | 12 | 1,2 | 2,2 | 3,2 | | | |
| | | 1,3 | | | | | |
| | 43. | 1,4 | | | | | |
| | 61 | | | | | | |
| | 16 | | | | | : | |





1. What is the probability of rolling a 1 and a 3?

The probability is _____.

2. What is the probability of rolling 4's on both dice?

The probability is _____

3. What is the probability of rolling 4,5 or 5,4?

The probability is _____.

4. What is the probability of rolling two dice that total 10?

The probability is _____.

5. What is the probability of rolling two dice that total 20?

The probability is _____

6. What is the probability of rolling two dice that total less than 13?

The probability is _____.