

Compound Events

Probability Word Problems - Dependent & Independent Events

Name: _____ Date: _____

- (1) Hailey wrote a computer program that generates two random numbers between one and nine. When she runs it, what is the probability that both values will be seven?
- (2) The game show contestant spins a spinner with the letters A through F on it, then either an easy or hard question is picked randomly for her. What is the probability that the spinner will not stop on the letter B and she is given a hard question?
- (3) Ashley tossed a die onto a black-and-red checkerboard. What is the probability that it will land with a value of one, on a red square?
- (4) The names of six boys and eleven girls from your class are put into a hat. What is the probability that the first two names chosen will be a boy followed by a girl?

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ANSWER KEY

- (1) Hailey wrote a computer program that generates two random numbers between one and nine. When she runs it, what is the probability that both values will be seven?

$$\frac{1}{9} \times \frac{1}{9} = \frac{1}{81}$$

- (3) Ashley tossed a die onto a black-and-red checkerboard. What is the probability that it will land with a value of one, on a red square?

$$\frac{1}{2} \times \frac{1}{6} = \frac{1}{12}$$

- (2) The game show contestant spins a spinner with the letters A through F on it, then either an easy or hard question is picked randomly for her. What is the probability that the spinner will not stop on the letter B and she is given a hard question?

$$\frac{5}{6} \times \frac{1}{2} = \frac{5}{12}$$

- (4) The names of six boys and eleven girls from your class are put into a hat. What is the probability that the first two names chosen will be a boy followed by a girl?

$$\frac{6}{17} \times \frac{11}{16} = \frac{66}{272} = \frac{33}{136}$$