# ✓ Congratulations! You passed!

**Grade received** 100%
**Latest Submission Grade** 100%
**To pass** 80% or higher

**Go to next item**

1. You repeatedly roll a die (some large number of times, say 1M) and come up with the          **1 / 1 point**
   following probability of roll results for spots 1-6 in order:
   {0.14,0.10,0.20,0.14,0.14,0.28}. The probability of rolling a 3 is greater than that of
   rolling a 4.

   ○ False

   ⦿ True

   ⊘ **Correct**
   P(3) = 0.2 > P(4) = 0.14

2. The die in the previous question is fair.          **1 / 1 point**

   ○ True

   ⦿ False

   ⊘ **Correct**
   The listed probabilities are not identical.

3. You toss a both a fair coin and a fair die simultaneously. The sample space is          **1 / 1 point**

   ○ A: {(HT),(1,2,3,4,5,6)}

   ⦿ B: {(H,1),(H,2),(H,3),(H,4),(H,5),(H,6),(T,1),(T,2),(T,3),(T,4),(T,5),(T,6)}

✓ **Correct**

correct, the elementary outcomes given by the results pairs (coin, die) are enumerated with all possible pairs

**4.** In this game of tossing a coin and die, the die comes up 6. What is the probability of the coin landing heads?    **1 / 1 point**

◉ A: 0.5

◯ B: 0.8

✓ **Correct**

Correct, having observed the 6, we are left with the probability of heads vs tails

**5.** You do the game twice, in the first trial, it came up (H,6). What is the probability that event will occur in the second go?    **1 / 1 point**

◉ B: 0.08

◯ A: 0.69

✓ **Correct**

Correct, in a single trial $P(H) = 1/2$ while $P(6) = 1/6$; $P(H,6) = P(H)P(6) = 1/12 = 0.08$