*Probability - True or False?*

* In pairs, decide whether each statement is a true or false.
* Write down your reasons for your decision.
* Join together with another pair and try to reach an agreement as a four.

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| **Statement** | **True or False** |
| When you roll a six sided die it is harder to roll a six than a fourhttp://tbn2.google.com/images?q=tbn:uH9WngYizCMl4M:http://www.flightglobal.com/blogs/terminal-q/dice.gif |  |
| Scoring a total of three with two dice is twice as likely as scoring a total of two. http://tbn2.google.com/images?q=tbn:uH9WngYizCMl4M:http://www.flightglobal.com/blogs/terminal-q/dice.gif |  |
| http://tbn3.google.com/images?q=tbn:Wrgb8MD3AvWCSM:http://www.asportsbetting.com/images/lottery-ticket.gif In a lottery the six numbers 3,12,26,37,44,45 are more likely to come up than the six numbers 1,2,3,4,5,6. |  |
| Two equally matched teams decide to play a game of football. There are three outcomes in a football match: win, lose or draw. The probability of winning is therefore 1/3. http://tbn1.google.com/images?q=tbn:wS7Bd0-mBDxKwM:http://ihome.ust.hk/~su_ceng/football.jpg |  |
| If you toss a coin five times and get five heads in a row, the next time you toss a coin it is more likely to show a tail than a head.http://tbn0.google.com/images?q=tbn:1QEw0q4t67mhRM:http://www.falklandcollectibles.com/TwoPoundCoinBack.jpg |  |
| http://tbn2.google.com/images?q=tbn:oP8m6UkGiclH2M:http://www.cakecarousel.com/cakecarousel/images/product/1172270909_Happy%2520Birthday.jpg In a group of ten psychology students, the probability of two psychology students being born on the same day of the week is 1. |  |
| If a family has already got four boys, then the next baby is more likely to be a girl than a boy. http://tbn3.google.com/images?q=tbn:J5nPBlk2GvOqWM:http://www.glacialridge.org/images/ecards/baby_stork_boy_lg.jpg  |  |