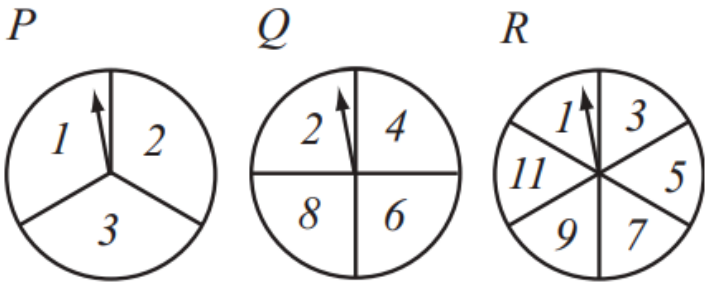
1 / 10

2006 Q17

17. Jeff rotates spinners P, Q and R and adds the resulting numbers. What is the probability that his sum is an odd number?



(A) $\frac{1}{4}$ **(B)** $\frac{1}{3}$ **(C)** $\frac{1}{2}$ **(D)** $\frac{2}{3}$ **(E)** $\frac{3}{4}$

2 / 10

2001 Q18

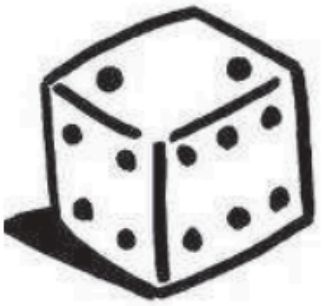
18. Two dice are thrown. What is the probability that the product of the two numbers is a multiple of 5?

(A) $\frac{1}{36}$ (B) $\frac{1}{18}$ (C) $\frac{1}{6}$ (D) $\frac{11}{36}$ (E) $\frac{1}{3}$

3 / 10

2011 Q18

18. A fair six-sided die is rolled twice. What is the probability that the first number that comes up is greater than or equal to the second number?



(A) $\frac{1}{6}$ **(B)** $\frac{5}{12}$ **(C)** $\frac{1}{2}$ **(D)** $\frac{7}{12}$ **(E)** $\frac{5}{6}$

4 / 10

2014 Q18

18. Four children were born at City Hospital yesterday. Assume each child is equally likely to be a boy or a girl. Which of the following outcomes is most likely?

(A) all 4 are boys **(B)** all 4 are girls **(C)** 2 are girls and 2 are boys

(D) 3 are of one gender and 1 is of the other gender

(E) all of these outcomes are equally likely

5 / 10

1998 Q19

19. Tamika selects two different numbers at random from the set $\{8, 9, 10\}$ and adds them. Carlos takes two different numbers at random from the set $\{3, 5, 6\}$ and multiplies them. What is the probability that Tamika's result is greater than Carlos' result?

(A) $\frac{4}{9}$ **(B)** $\frac{5}{9}$ **(C)** $\frac{1}{2}$ **(D)** $\frac{1}{3}$ **(E)** $\frac{2}{3}$

6 / 10

2008 Q19

19. Eight points are spaced at intervals of one unit around a 2×2 square, as shown. Two of the 8 points are chosen at random. What is the probability that the points are one unit apart?

(A) $\frac{1}{4}$ **(B)** $\frac{2}{7}$ **(C)** $\frac{4}{11}$ **(D)** $\frac{1}{2}$ **(E)** $\frac{4}{7}$

7 / 10

1995 Q20

20. Diana and Apollo each roll a standard die obtaining a number at random from 1 to 6. What is the probability that Diana's number is larger than Apollo's number?

(A) $\frac{1}{3}$ **(B)** $\frac{5}{12}$ **(C)** $\frac{4}{9}$ **(D)** $\frac{17}{36}$ **(E)** $\frac{1}{2}$

1997 Q20

20. A pair of 8-sided dice have sides numbered 1 through 8. Each side has the same probability (chance) of landing face up. The probability that the product of the two numbers on the sides that land face-up exceeds 36 is

(A) $\frac{5}{32}$ **(B)** $\frac{11}{64}$ **(C)** $\frac{3}{16}$ **(D)** $\frac{1}{4}$ **(E)** $\frac{1}{2}$

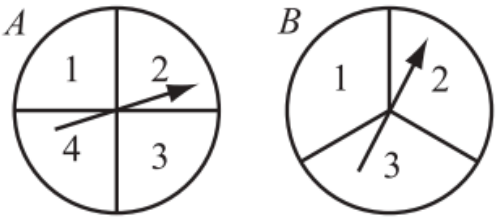
2017 Q20

20. An integer between 1000 and 9999, inclusive, is chosen at random. What is the probability that it is an odd integer whose digits are all distinct?

(A) $\frac{14}{75}$ **(B)** $\frac{56}{225}$ **(C)** $\frac{107}{400}$ **(D)** $\frac{7}{25}$ **(E)** $\frac{9}{25}$

2004 Q21

21. Spinners A and B are spun. On each spinner, the arrow is equally likely to land on each number. What is the probability that the product of the two spinners' numbers is even?



(A) $\frac{1}{4}$ **(B)** $\frac{1}{3}$ **(C)** $\frac{1}{2}$ **(D)** $\frac{2}{3}$ **(E)** $\frac{3}{4}$