Name: _____ **Class:** _____ **Date:** _____ **ID: A**

Binomial_Distribution

____ 1. A survey of high school juniors found that 81% of students plan on attending college. If you pick three students at random, what is the probability that at least two plan on attending college? Round to the nearest percent.

a. 37% b. 91% c. 9% d. 47%

____ 2. A poll shows that 82% of voters in a city favor an initiative to increase spending on public schools. If 10 voters are selected at random, what is the probability that exactly five of them will vote in favor of the initiative?

a. 30% b. 7% c. 12% d. 1.8%

____ 3. A survey of high school juniors found that 76% of students plan on attending college. If you pick three students at random, what is the probability that at least two plan on attending college? Round to the nearest percent.

a. 15% b. 85% c. 56% d. 42%

____ 4. A poll shows that 77% of voters in a city favor an initiative to increase spending on public schools. If 10 voters are selected at random, what is the probability that exactly five of them will vote in favor of the initiative?

a. 9% b. 4.4% c. 28% d. 14%

5. Billy is flipping a coin. The two possible outcomes are heads or tails. What is the probability that the result will have exactly 18 tails after 34 flips? Express your answer rounded to five decimal places.

6. Billy is rolling a 8-sided die. What is the probability that the result will have exactly 5 fours after 10 rolls? Express your answer rounded to five decimal places.

7. Sarah is flipping a coin. The two possible outcomes are heads or tails. What is the probability that the result will have exactly 12 heads after 16 flips? Express your answer rounded to five decimal places.

8. Julie is rolling a 20-sided die. What is the probability that the result will have exactly 2 thirteens after 4 rolls? Express your answer rounded to five decimal places.

Binomial_Distribution
Answer Section

1. B
2. D
3. B
4. B
5. 0.12829
6. 0.00394
7. 0.02777
8. 0.01354