

Spring Break Packet

1. 1. A machine makes 300 boxes in $\frac{1}{4}$ hours. Which expression equals the unit rate in boxes per hour? 1 point

Mark only one oval.

- A $300 \times \frac{1}{4}$
- B $300 + \frac{1}{4}$
- C $300 \div (\frac{1}{4})$
- D $300 - \frac{1}{4}$

2. 2. Tyreis bought 52 pounds of grapes for \$7.75. Using the unit rate, how much would 3 pounds of grapes cost? 1 point

Mark only one oval.

- A \$1.49
- B \$2.98
- C \$4.47
- D \$12.22

3. 3. What is the percent of increase for a population that changed from 25,000 to 30,000? 1 point

Mark only one oval.

- A 16.6%
- B 20%
- C 83.3%
- D 120%

4. 4. A merchant buys a television for \$125 and marks it up by 60%. What is the retail price of the television? 1 point

Mark only one oval.

- A \$73
- B \$75
- C \$80
- D \$78

5. 5. How much interest is earned in 2 years on a deposit of \$2,000? The simple interest rate is 3% 1 point

Mark only one oval.

- A \$120
- B \$1,200
- C \$60
- D \$600

6. 6. A quarter is what percent of a dollar?

1 point

Mark only one oval.

- A 4%
- B 25%
- C 75%
- D 400%

7. 7. Arianna bought shoes marked \$55. The sales tax is 8.34%. How much did the shopper pay in all?

1 point

Mark only one oval.

- A \$59.23
- B \$59.52
- C \$59.40
- D \$59.59

8. 8. A sample is being chosen for a survey to find out how people feel about building an ice cream shop at to a baseball field using city money. Which group would be least biased?

1 point

Mark only one oval.

- A Baseball Players
- B Fans that attend Baseball games
- C Fans that attend all sports in that area
- D Tax Payers

9. 9. Alec rolled a number cube that has sides labeled 1 to 6. What is the probability that he rolls a number greater than 2? 1 point

Mark only one oval.

- A $\frac{1}{6}$
- B $\frac{1}{3}$
- C $\frac{2}{3}$
- D $\frac{1}{2}$

10. 10. Olivia has a bag of marbles. In the bag there are 12 green marbles, 14 orange marbles, 5 brown marbles and 19 stripe marbles. She draws one marble out of the bag, what is the probability that it is an orange marble? 1 point

Mark only one oval.

- A $\frac{6}{25}$
- B $\frac{7}{25}$
- C $\frac{1}{10}$
- D $\frac{8}{25}$

11. 11. Ayanna flips a coin 3 times. What is the probability that she flips tails all 3 times? 1 point

Mark only one oval.

- A $\frac{1}{8}$
- B $\frac{3}{8}$
- C $\frac{2}{3}$
- D $\frac{7}{8}$

12. 12. Jamel can choose between 3 pairs of pants and 4 shirts. How many different outcomes are in the sample space? 1 point

Mark only one oval.

- A 7
- B 12
- C 34
- D 81

13. 13. Morgan flipped a coin ten times. She flipped heads 4 times and tails 6 times. What is the experimental probability that Morgan will flip heads on her next flip? 1 point

Mark only one oval.

- A $1/6$
- B $2/5$
- C $1/2$
- D $3/4$

14. 14. Amarachi rolls two number cubes, each with sides that are labeled 1 to 6. What is the probability that she rolls a three or less? 1 point

Mark only one oval.

- A $1/12$
- B $1/6$
- C $1/9$
- D $1/3$

15. 15. A sandwich shop offers 3 types of bread (white, wheat, raisin), 4 types of meats (turkey, chicken, beef, and ham), and 2 types of cheese (American, swiss). What is the probability of buying a beef and swiss on any type of bread? 1 point

Mark only one oval.

- A $1/6$
- B $1/2$
- C $1/8$
- D $2/3$

16. 16. Jared is building a 1,500 square feet home. The contractor asks him to pay a little more money and he will increase the square footage by 12%. Jared agrees to pay the extra money. What will the new square footage of the home be? 1 point

Mark only one oval.

- A 1,815 sq ft
- B 1,320 sq ft
- C 1,680 sq ft
- D 2,820sq ft

17. 17. Honda motorcycles normally sell for \$8,500. It is now on sale for 37% off. As an employee, Samart is able to save an extra 15% off the sale price. How much, to the nearest dollar, would Samart need to pay for the motorcycle? 1 point

Mark only one oval.

- A \$4,625
- B \$5,355
- C \$4,975
- D \$4,552

18. 18. Maddison stops by here local diner for lunch. The lunch cost \$15.76. She pays a sale tax of 7.75% and leaves a 12% tip. What was the total cost of the meal? 1 point

Mark only one oval.

- A \$14.54
- B \$12.65
- C \$13.87
- D \$12.60

19. 19. Caden deposits \$430 into a new savings account. The account earns 6.9% simple interest per year. What is the total amount of money in his savings account at the end of 4 years? 1 point

Mark only one oval.

- A \$548.68
- B \$598.68
- C \$568.68
- D \$558.68

20. 20. Alyssa is making bread. The recipe requires $3\frac{1}{4}$ teaspoons of sugar and $1\frac{1}{8}$ cups of flour. How much sugar is needed when a cup of flour is used to make the bread? 1 point

Mark only one oval.

- A 3 teaspoons per cup
- B $2\frac{1}{4}$ teaspoons per cup
- C $2\frac{4}{5}$ teaspoons per cup
- D $2\frac{8}{9}$ teaspoons per cup

21. 21. Adam wants to buy Apple AirPods. At the store, the AirPods cost \$139. On Friday only, the store will have a sale and discount of 17%. Anyone who buys the AirPods before 9:30am will get an additional 22% off the sale price. How much will Adam pay, when he buys the AirPods on Friday before 9:30am? 1 point

Mark only one oval.

- A \$89.99
- B \$99.99
- C \$79.99
- D \$69.99

22. 22. Omar is dividing a board into 5 equal-size pieces. If each piece length is 7.9 inches and there is 2.3 inches left over, how long was the length of the board? 1 point

Mark only one oval.

- A 39.5 inches
- B 41 inches
- C 41.8 inches
- D 42.3 inches

23. 23. Arielle is spinning a spinner that has 8 sections. Two sections are blue, two sections are red, one section is green, three sections are black. What is the probability of spinning and landing on black? 1 point

Mark only one oval.

A $\frac{1}{4}$

B $\frac{1}{8}$

C $\frac{5}{8}$

D $\frac{3}{8}$

24. 24. Trinity has choice of clothes to pick from. She can pick between 2 pairs of pants (black and blue), 2 shirts (white or yellow) and 2 pair of shoes (black or white). What is the probability of not wearing any black in her outfit? 1 point

Mark only one oval.

A $\frac{1}{8}$

B $\frac{1}{4}$

C $\frac{3}{8}$

D $\frac{1}{2}$

25. 25. Isabel records the type and number of vehicles that pass by her house from 9am to 12 noon. She counted 11 SUV's, 29 cars, and 5 tow trucks. What is the probability that the next vehicle will be a fire truck racing to put out a fire down the block? 1 point

Mark only one oval.

- A $11/45$
- B $29/45$
- C $1/9$
- D 0

26. 26. A computer program selects orange, yellow or gray as the background color each time the program is used. The program was used 60 times on the same computer in one week. Of those 60 times, an orange background appeared 15 times and the yellow background appeared 30 times. Based on this information, which statement about the likelihood of the gray background appearing the next time the program is used is true? 1 point

Mark only one oval.

- A Gray is not as likely as orange to appear, but is as likely as yellow
- B Gray is not as likely as yellow or orange to appear
- C Gray is just as likely as orange to appear, but not as likely as yellow
- D Gray is just as likely as yellow or orange to appear

27. 27. Which number represents the probability of an event that is unlikely to occur? 1 point

Mark only one oval.

- A 1.0
- B 0
- C 0.75
- D 0.25

28. 28. Geordany has a coupon for 21.5% off the regular price of a cell phone. The sales tax is 9.45%. If Geordany purchases the cell phone with a regular price of \$820. How much will he pay, including sales tax, if he uses the coupon after he pays the sales tax? 1 point

Mark only one oval.

- A \$897.49
- B \$704.53
- C \$627.04
- D \$789.05

29. 29. Regina makes pies. She uses $8\frac{3}{4}$ cups of flour to make 10 pies. How many cups of flour are needed to make 1 pie? 1 point

Mark only one oval.

- A $\frac{7}{8}$
- B $\frac{4}{5}$
- C $\frac{3}{8}$
- D $\frac{3}{4}$

30. 30. One of the highest snowfall rates ever recorded was in Utah. 7 feet of snow fell in $15 \frac{3}{4}$ hours. What was the rate in feet per hour? 1 point

Mark only one oval.

- A $\frac{2}{9}$
- B $\frac{1}{9}$
- C $\frac{4}{9}$
- D $\frac{5}{9}$

31. 31. The WORD of the DAY is one of the choices below. The correct choice starts with the letter of the answer to question number 26. 1 point

Mark only one oval.

- A Attitude
- B Brave
- C Champion
- D Diligence

32. 32. Write a one sentence response to the "word of the day." For example, what does the word mean to you or how could you apply it in your life. (I WILL GRADE YOUR RESPONSE, THE COMPUTER WILL GIVE YOU A ZERO UNTIL I PUT THE GRADE IN: ***POINT VALUE IS 0-20) 20 points
