_____ 1) How many cubic inches are in 1 cubic foot?

_____ 2) Evaluate: 2^{12}

_____ 3) As a decimal, find the arithmetic mean of the first six digits of the decimal expansion of π.

_____ 4) Evaluate: $1{,}234 - 4{,}321$

_____ 5) What is the sum of the first seven smallest triangular numbers?

_____ 6) Jordan's magic number is doubled, then decreased by 20, then squared. The resulting number is 196. What is Jordan's magic number?

_____ 7) How many positive three-digit integers are multiples of 3, but not of 5?

_____ 8) How many positive five-digit integers are perfect squares?

_____ 9) Evaluate: $21 \times 21\frac{20}{21}$

_____ 10) A bag contains three green marbles and seven blue marbles. What is the probability that Yoon Jae randomly selects two marbles from the bag without replacement and they are the same color? Express your answer as a common fraction.

_____ 11) Given $f(x) = 2x - 456$ and $g(x) = x^3 - 3$, find $f(g(9))$.

_____ 12) Find the sum of the first 100 terms of the arithmetic sequence: -8, -5, -2, 1, …

_____ 13) Solve for x: $\log_2(x+1) = 2\log_2(x-1)$

_____ 14) A triangle has sides of integer lengths of either 1, 2, or 3. How many distinct non-degenerate triangles exist?

_____ 15) If two fair six-sided dice are rolled, what is the probability that the resulting sum is a prime number? Express your answer as a common fraction.

_____ 16) Evaluate: 84×76

_____ 17) Find the length of the major axis of the ellipse $4x^2 + 9y^2 = 36$.

_____ 18) In how many different ways can the letters in the word CALIFORNIA be arranged along a line?

_____ 19) Solve for x: $8^{x-1} = \frac{1}{32}$. Answer as a common fraction.

_____ 20) How many integers x satisfy the inequality $|2x - 1| < 10$?

_____ 21) What is the equation of a line in slope-intercept form that passes through (4,6) and the origin?

_____ 22) Evaluate $(3-i)^2 + (3-i)(3+i)$, where $i = \sqrt{-1}$.

_____ 23) How many positive three-digit integers have all odd digits and no two consecutive digits that are the same?

_____ 24) What is the area between the graph of $y = |x|$ and the x-axis on the interval $-5 \le x \le 5$?

_____ 25) From a standard 52-card deck, how many distinct five-card poker hands can be made that contain exactly one ace and four face cards? A face card is either a Jack, Queen, or King.

_____ 26) The probability that Edwin gets an A in Spanish class is 0.60 and the probability that Casey gets an A in Spanish class is 0.50. If they are independent events, what is the probability exactly one of them will get an A? Express your answer as a decimal.

_____ 27) Evaluate $1331^{-4/3}$. Express your answer as a common fraction.

_____ 28) Express $\frac{555}{9}$ as a mixed number.

_____ 29) What is the distance between the points $(3, -2)$ and $(-3,4)$? Express your answer in simplest radical form.

_____ 30) What is the sum of the Least Common Multiple and Greatest Common Factor of 30 and 45?

_____ 31) What is the simple interest earned on a \$50,000 loan at 8% for 3 months? Express your answer in dollars.

_____ 32) Evaluate:

$$32 \times 17 + 17 \times 118$$

_____ 33) What is the slope of a line perpendicular to the line with equation $13x - 11y = 143$? Express your answer as a common fraction.

_____ 34) 40% of 200 is the same as 800% of what number?

_____ 35) How many diagonals are in a regular decagon?

_____ 36) What is the sum of the units digit of 2^{234} and the units digit of 3^{234}?

_____ 37) What is the degree measure of each interior angle of a regular octagon?

_____ 38) Evaluate:

$$50 \times 50 - 50 \div 50 + 50 \times 50 + 50 \div 50$$

_____ 39) Evaluate: $7! - 6!$

_____ 40) If three elves can build six toys in two hours, how many toys can six elves build in four hours working at the same rate?