_____ 1. Evaluate: $2018^2 - 2017^2$

_____ 2. Find remainder of 2018 divided by 18

_____ 3. Evaluate: 2018*11

_____ 4. Find larger solution for x:
$x^2 - 20x + 51 = 0$

_____ 5. Find the sum of the arithmetic series:
1,4,7,...,100

_____ 6. Evaluate: $i^3 + i^6 + i^9 + i^{12} + i^{15} + i^{18}$

_____ 7. What is the acute angle (in degrees) made between the hour and minute hands at time 6:30 on a standard 12 hour clock?

_____ 8. f(x) = 3x-2. g(x) = x^2 - 3x.
Find f(g(2)) + g(f(1))

_____ 9. Find the units digit of $2^{2018} + 0^{2018} + 1^{2018} + 8^{2018}$

_____ 10. Find the area of a regular octagon with side length 2

_____ 11. Assume that 5 used up widgets can be combined to make 1 new working widget, and each new widget can be used once. How many widget uses can you have if you start with 121 new widgets?

_____ 12. Find the area of a right triangle with base 20 and hypotenuse 29.

_____ 13. Given 10 evenly spaced points on a circle labeled A to J, how many quadrilaterals can be drawn by connecting 4 of those points?

_____ 14. Find the surface area of a rectangular prism with edge lengths 3,4,5

_____ 15. Evaluate: $4^{\log_8(27)}$

_____ 16. Evaluate: $\sqrt{20 + \sqrt{20 + \sqrt{20 + \cdots}}}$

_____ 17. 18 points are evenly spaced on a circle. How many distinct 18-pointed stars are there using these points as vertices?

_____ 18. How many distinct permutations exist for the letters MENTALMATH?

_____ 19. Find the sum of all distinct, positive integral factors of 12

_____ 20. Write $2.\overline{018}$ as a reduced and simplified fraction

_____ 21. Evaluate: 2018 - 8102

_____ 22. Evaluate: $\sum_{n=2}^{5}(n^2 + 2018)$

_____ 23. What is the probability of a yahtzee (rolling 5 dice and getting all the same number)? Write as a reduced and simplified fraction.

_____ 24. How many distinct ways can you make $0.25 using pennies, nickels, dimes, and quarters?

_____ 25. The ratio of sphere A's to sphere B's volume is 8:27. The surface area of sphere A is 20. Find the surface area of sphere B.

_____ 26. Which is bigger: 2018! or 1009^{2018}

_____ 27. Billy, Bob, and Joe can each independently paint a barn in 3, 4, and 12 hours, respectively. How many hours would it take them to paint 2 barns together?

_____ 28. A rectangular prism has faces with areas 6,10,15. Find its volume.

_____ 29. What is the 15th fibonacci number? (assume series starts 1,1,2,3,5,...)

_____ 30. Find the number of digits in the expansion: $3^4 * 4^3 * 5^2 * 6^1$

_____ 31. Solve for x: $27^x = 1/81$

_____ 32. Evaluate: 1 + 3 + 9 + 27 + 81 + 243 + 729

_____ 33. How many integers satisfy |1-3x| < 20

_____ 34. Convert to Base 3: 2018_9

_____ 35. Evaluate: $\frac{1}{3} + \frac{3}{5} + \frac{5}{7}$

_____ 36. A standard twelve hour clock shows 12:00. What time will it show 2018 minutes from now?

_____ 37. Find the 4th largest integral factor of 42

_____ 38. Find the point ¾ of the way from (16,17) to (64,85)

_____ 39. x+y = 5. $x^3+y^3 = 5$. Find xy

_____ 40. If the independent probabilities of each of Larry, Moe, and Curly slipping are 0.4, 0.5, and 0.6, what is the probability (as a decimal) that exactly one of them slips?