1. Find $5 - 3 \times 6 + 4 \div 2$.

2. Find the smallest positive *even* multiple of 17.

3. If water flows through a pipe at a rate of 4 liters per minute, how many liters of water will flow through the pipe in 15 minutes?

4. Jonah has 3 more books than Amira. Arthur has 15 more books than Amira. How many more books does Arthur have than Jonah?

5. A computer costs \$1000 and a phone costs \$500. Sean buys \$5000 dollars worth of phones and computers. How many computers does he buy if he buys 2 phones?

6. What is the second smallest whole number divisible by three distinct primes?

7. What is the area, in square feet, of a rectangular dining table with a length of 5 yards and width of 60 inches?

8. There is a 9×8 checkerboard with only alternating white and black squares. How many squares on the checkerboard are black?

9. Sean, Jeffrey, Tanush, and Brian all wish to see a show, but they only have two tickets. In how many ways can they decide who goes to the show?

10. Bob flips a fair coin 10 times, and it comes up heads 7 times and tails 3 times. Bob then flips a coin 10 times again. How many times should he expect it to turn up heads?

11. A woc is equivalent to 4 gips. A gip is equivalent to 5 tacs. Parth is 7 gips, 3 wocs, and 9 tacs tall. What is his height, in tacs?

12. 25% of a class is 20 years old, $\frac{1}{3}$ of the people in the class are 21 years old, and the rest of the people in the class are 22 years old. Given that there is the least number of possible 22-year-olds in the class that meet these conditions, how many ways can the teacher make a single group of one person from each age?

13. How many 3 digit numbers do not contain a 0?

14. A certain father fashions a colorful assortment of clothing: On any day, it is given that he is wearing at least 1 of the following items. He has a black sweater, a blue jacket, a green t-shirt, and a red suit. He can wear up to all four of these items and can wear any combination of such. How many ways can this father dress on any day?

15. What is the smallest positive whole number one could multiply with 53235325884 such that the product is divisible by 9?

16. Nathan, Parth, Tanush, Richard, and Sean go to dinner together. They each agree to pay $\frac{1}{5}$ of the bill, but Sean forgot his money! Parth, Tanush, Richard, and Nathan agree to pay an extra 3.25 to cover Sean's part of the bill (it was also his birthday). What was the total cost of the bill?

17. Before half-time, Tanush shoots 15 3-pointers and makes 1 of them. If after half-time, Tanush doesn't miss, how many more 3-pointers will he have to shoot to raise his shooting percentage to exactly 30%?

18. The product of two positive real numbers is equal to twice the larger number divided by the smaller number. What value must one of the numbers be?

19. Parth has 100 dollars. Suddenly, the amount of money in his pocket increased by $x\%$. The next day, the money in his pocket increased by $x\%$ again. If he ends with \$169, what is x?

20. This year, Alice, Bob, Carl, and David's ages are all two-digit distinct prime numbers less than 40. Ten years later, all of their ages will STILL be distinct prime numbers. What is the sum of their ages this year?

21. Consider any positive 3-digit number that has a difference of 495 when the same number when the digits are reversed is subtracted from it. Compute the difference between the first and last digit of the 3-digit number.

22. A square and a circle both have an area of 10. The side length of the square is increased by 10%. By what percentage does the radius of the circle have to be increased for the circle to have the same percentage increase in area as the square?

23. Magnus likes 8 different chess engines: 5 use machine learning algorithms and 3 don't. He must pick 3 to analyze his match against Tanush as long as he uses AT LEAST 2 machine learning based engines. How many ways can he pick his engines?

24. A regular hexagon with a side length of 4 is cut into two pieces by drawing a line from one vertex to the next closest vertex such that a triangle will be formed for one piece. What is the area of the smaller piece?
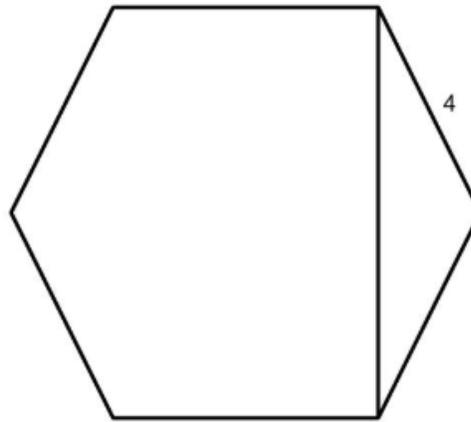
25. In the geometric sequence $2, 12, 72,...$ which term number (such as "4th term") has a total of 90 factors? 2 is considered the first term.