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2025-2026 Math League Preliminary Round

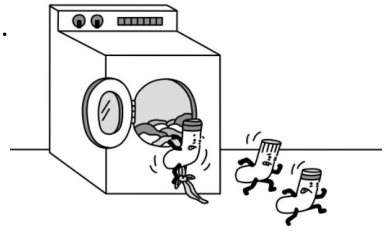
(Grade 3)

(Unofficial version, for reference only)

1. $20 + 24 = 20 + 20 + \underline{?}$

   A) 2 B) 4 C) 6 D) 8

2. Ethan has 12 fewer socks than 12 pairs of socks. Ethan has $\underline{?}$ socks.



   A) 0 B) 2

   C) 6 D) 12

3. $(1 + 2 + 3) \times (10 + 20 + 30) =$

   A) 66 B) 300 C) 360 D) 660

4. I only swam on 6 days in the last 3 weeks. I did **not** swim on exactly $\underline{?}$ days in the last 3 weeks.



   A) 3 B) 12 C) 15 D) 18

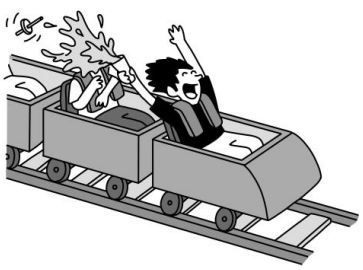
5. The total number of sides 4 squares have is $\underline{?}$ more than the total number of sides 3 triangles have.

   A) 1 B) 4 C) 6 D) 7

6. If \$3 less than my allowance equals half my allowance, what is twice my allowance?

   A) \$6 B) \$12 C) \$18 D) \$24

7. Josh rode each of six rides 4 times in a row and each of three other rides 5 times in a row. How many times did Josh ride rides?



   A) 9 B) 20

   C) 24 D) 39

8. How many different 3-digit whole numbers can be made using the digits 1, 2, and 3, with no digit repeated?

A) 4 B) 6 C) 8 D) 12

9. Which pair of numbers has a greatest common factor of 1?

A) 7 and 714 B) 7 and 727 C) 7 and 749 D) 7 and 770

10. Nina wrote the 100 integers from 0 to 99. How many times did Nina write the digit 1?

A) 10 B) 19 C) 20 D) 21

11. What is the tens digit of the sum of 2025 tens?

A) 0 B) 2 C) 3 D) 5

12. Kelcey spends $15 a month on ice cream. How much will Kelcey spend on ice cream from May 1 through August 31?

A) $15 B) $30 C) $45 D) $60

13. Any number that is divisible by both 8 and 12 is also divisible by

A) 7 B) 10 C) 20 D) 24

14. When turned on, my music player plays my 50 songs in order from 1 to 50 and then starts playing them again in the same order. It repeats this pattern until I turn it off. If my music player played 2025 songs when it was last on, which numbered song did it play last?

A) 15th B) 20th C) 25th D) 50th

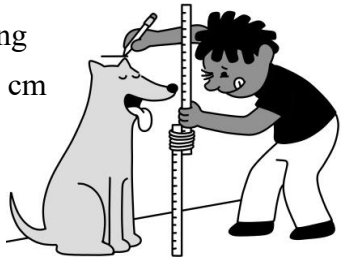
15. How many common factors do $1 \times 2 \times 3$ and $4 \times 5 \times 6$ share?

A) 0 B) 1 C) 3 D) 4

16. $100 + 200 + 300 + 400 = (10 + 20 + 30 + 40) \times \underline{?}$

A) 10 B) 40 C) 100 D) 400

17. Pat tried to make a special extra-long ruler by taping one 30-cm-long ruler to another 30-cm-long ruler. If the two rulers overlapped by 6 cm lengthwise, what was the length of Pat's extra-long ruler?



A) 42 cm B) 48 cm

C) 54 cm D) 60 cm

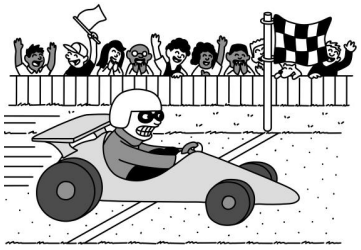
18. In a video game, Andrew earns 100 points for every challenge he meets, but loses 50 points for every challenge he fails. If Andrew met twice as many challenges as he failed, his total points could be

A) 100 B) 150 C) 200 D) 250

19. What is the total number of zeroes in the ten smallest multiples of 100 that are greater than 0?

A) 18 B) 19 C) 20 D) 21

20. My go-cart's nose crossed the finish line on a straight racecourse 90 seconds after my go-cart's nose crossed the start line. If the racecourse is 90 times as long as my go-kart, which is 2 m long, what was my average speed?



A) 1 m/sec. B) 2 m/sec. C) 3 m/sec. D) 6 m/sec.

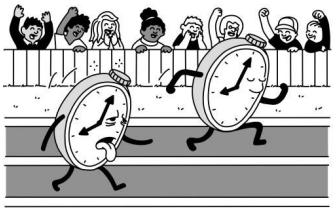
21. After dividing 144 books evenly among 6 bins, Liv decided to divide the books evenly among 8 bins instead. How many books must Liv remove from *each* of the original 6 bins so that she has enough books to fill the 2 new bins, and all 8 bins have the same number of books?

A) 6 B) 8 C) 18 D) 24

22. My house number can be written as the product of 2 different even integers or as the product of 1 even integer and 3 different odd integers greater than 1. What is my smallest possible house number?

A) 30 B) 60 C) 210 D) 420

23. If a clock loses 5 seconds every hour, how many seconds will it lose in one week?



A) 360 B) 720 C) 840 D) 1200

24. The difference between a prime number and one of its factors cannot be

A) 0 B) 1 C) 2 D) 3

25. Which of the following sums is a multiple of 6?

A) 26 + 36 B) 26 + 46 C) 26 + 56 D) 26 + 66

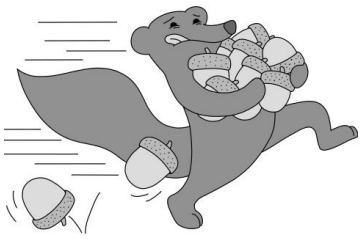
26. If it is true that every squirrel loves nuts and some squirrels run fast, which of the following must also be true?

A) Some nut-loving squirrels run fast.

B) All fast animals love nuts.

C) Some fast squirrels dislike nuts.

D) All squirrels run fast.



27. Of the following lengths, which is the longest?

A) 0.23 m B) 23 cm C) 1 km D) 2300 mm

28. A ? can never have a pair of parallel sides.

A) pentagon B) rhombus C) triangle D) trapezoid

29. If the area of a non-square rectangle that has integer side-lengths is a perfect square, the sum of its length and width could be

A) 11 B) 12 C) 13 D) 14

30. Lu sees a constellation with 8 stars in it, and no 3 of them appear to be collinear. If she mentally draws lines connecting each of the 8 stars to each of the other stars, how many lines must she draw?



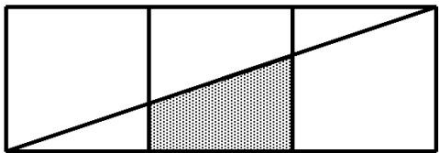
A) 15 B) 16 C) 28 D) 56

31. How many different prime factors does 2025^{26} have?

A) 2 B) 6 C) 52 D) 156

32. Positive integers a, b, and c are each less than 5, but are not necessarily different. For at most how many different triples (a, b, c) will the product abc be odd?

33. A rectangle of area 300 is divided into 3 congruent squares, and a diagonal of the rectangle is drawn, as shown. What is the shaded region's area?



34. A superprime is a positive integer that is the product of exactly two different primes. What is the least possible sum of two superprimes that differ by 1?



35. What is the length of the longest side of an isosceles triangle with integral side-lengths and perimeter 5?

Answers										
Question	1	2	3	4	5	6	7	8	9	10
Answers	**B**	**D**	**C**	**C**	**D**	**B**	**D**	**B**	**B**	**C**
Question	11	12	13	14	15	16	17	18	19	20
Answers	**D**	**D**	**D**	**C**	**D**	**A**	**C**	**B**	**D**	**B**
Question	21	22	23	24	25	26	27	28	29	30
Answers	**A**	**D**	**C**	**D**	**B**	**A**	**C**	**C**	**C**	**C**
Question	31	32	33	34	35					
Answers	**A**	**8**	**50**	**29**	**2**					