

Orange County Math Circle Thanksgiving Tournament  
Grade 3 - 4 Sprint Round

Name:

School:

Grade:

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1.  $5 \times 1 + 6 \div 3 + 2 \times 0 = ?$   
(A) 0    (B) 7    (C) 3    (D) 9    (E) 1
  
2. Which of the following numbers divides 373 to leave a remainder of 1?  
(A) 2    (B) 3    (C) 5    (D) 7    (E) 11
  
3. What is the tens digit of  $2 \times 2552$ ?  
(A) 4    (B) 2    (C) 0    (D) 2    (E) 9
  
4.  $5 \times 1 + 3 - 6 + 2 \times 0 =$   
(A) 0    (B) 7    (C) 3    (D) 2    (E) 1
  
5. I always beep every four hours. The last time I beeped was 10:00 AM. When will I beep next?  
(A) 2 : 00 AM    (B) 2 : 00 PM    (C) 1 : 00 PM    (D) 1 : 00 AM    (E) 3 : 00 AM
  
6. James stands in line to purchase movie tickets. If there are 3 people in front of him and 5 people behind him, how many people are in the line?  
(A) 10    (B) 9    (C) 8    (D) 5    (E) 4
  
7. If Mary has two sisters and a brother named Mark. How many sisters does Mark have?  
(A) 0    (B) 1    (C) 2    (D) 3    (E) 4
  
8. Jack makes 1 dollar, 1 nickel, and 4 pennies every 4 days. How much money will he make at the end of 12 days?  
(A) \$1.09    (B) \$2.18    (C) \$3.27    (D) \$10.90    (E) \$13.08
  
9. What is the next number in this pattern? 1, 3, 6, 10, 15, 21, 28, (   )  
(A) 32    (B) 33    (C) 34    (D) 35    (E) 36
  
10. The area of a square is four. What is the length of one of the sides?  
(A) 3    (B) 4    (C) 2    (D) 1    (E) 8

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11. Which of the followings is NOT equal to  $10 + 5 + 10$ ?
- (A)  $5 + 5 + 5 + 5 + 5$     (B)  $7 + 7 + 7 + 4$     (C)  $3 + 9 + 5 + 7$   
(D)  $30 - 10 + 5$     (E)  $2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 1$
12. If 2 flips = 5 flaps and 10 flaps = 6 flops, then 4 flips = ? flops
- (A) 2    (B) 5    (C) 6    (D) 7    (E) 8
13. There are 15 marbles in a pile. Bob takes  $\frac{1}{5}$  of them for himself. Jen takes  $\frac{3}{4}$  of the remainder. Then Tom takes the rest. How many marbles does Tom have?
- (A) 2    (B) 3    (C) 4    (D) 5    (E) 6
14. Two days before yesterday is how many days before the day after yesterday?
- (A) 3    (B) 4    (C) 7    (D) 2    (E) 1
15. It is 8:30 AM right now. Bob started working at 7:45 AM. He stops working at 9:30 AM. How many minutes does Bob work?
- (A) 60    (B) 105    (C) 45    (D) 15    (E) 30
16. My sunflower doubles its height every day. It was 2 cm tall at noon yesterday. What height will it be at noon the day after tomorrow?
- (A) 4 cm    (B) 8 cm    (C) 16 cm    (D) 32 cm    (E) 64 cm
17. Twelve days after a Monday is what day?
- (A) Wednesday    (B) Thursday    (C) Friday    (D) Saturday    (E) Sunday
18. Each of the Chef's omelets uses 3 eggs. How many omelets can the Chef make with 1 dozen brown eggs, 1 dozen white eggs, and 1 dozen speckled eggs?
- (A) 1 dozen    (B) 2 dozens    (C) 3 dozens    (D) 4 dozens    (E) 5 dozens
19. If 19 policemen are on patrol in 9 cars, and each car is used by at least 2 policemen, then exactly 1 patrol car is used by how many policemen?
- (A) 1    (B) 2    (C) 3    (D) 4    (E) 5
20. If my florist needs 15 flowers to make 3 special bouquets, then how many flowers would my florist need to make 18 special bouquets?
- (A) 90    (B) 54    (C) 45    (D) 36    (E) 25

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21. It is 3:14 p.m. now. What time will it be in 5 hours and 56 minutes?  
(A) 9 : 10 PM    (B) 10 : 10 PM    (C) 8 : 10 PM    (D) 7 : 39 PM    (E) 8 : 36 PM
22. Mark is twice as old as Jack will be in 5 years. If Jack is 4 years old right now, how old will Mark be in 5 years?  
(A) 15    (B) 17    (C) 19    (D) 21    (E) 23
23.  $(100 + 98 + 96 + \dots + 2) - (99 + 97 + 95 + \dots + 1) = ?$   
(A) 25    (B) 50    (C) 99    (D) 100    (E) 101
24. Al milked Betsy from 3:18 PM to 4:56 PM today. At what time had Al finished half his milking?  
(A) 3 : 58 PM    (B) 4 : 04 PM    (C) 4 : 07 PM    (D) 4 : 10 PM    (E) 4 : 19 PM
25. If  $1 + 3 + 5 + \dots + 99 = 2500$ , then  $2 + 4 + 6 + \dots + 100 =$   
(A) 2550    (B) 2599    (C) 2600    (D) 5000    (E) 5600
26. The number of turkeys that live on Forest Farm is always a prime number. How many turkeys could be living on the farm right now?  
(A) 15    (B) 27    (C) 41    (D) 49    (E) 87
27. Using the digits 1, 3, and 5 only once, what is the largest value of  $(3 + \bigcirc) \times (4 \times \bigcirc - 12 + \bigcirc)$  that can be obtained?  
(A) 32    (B) 26    (C) 54    (D) 57    (E) 345
28. There are 200 animals running about on Thanksgiving Day. One tenth of them are horses. Half of the remaining animals are turkeys. One third of the remaining animals after that are pigs, and the rest are chickens. What is the ratio of horses to pigs?  
(A) 2 : 3    (B) 1 : 3    (C) 1 : 2    (D) 2 : 9    (E) 1 : 6
29. Subtract 20 from 4 times  $x$  to get 100. What is  $x$ ?  
(A) 120    (B) 80    (C) 40    (D) 30    (E) 25
30. If I have as many pennies as dimes, then the total value of all these coins could be:  
(A) \$1.01    (B) \$1.10    (C) \$1.11    (D) \$11.01    (E) \$11.11