

Abel Mathematics Contest

Grades 4 and 5
May, 2007



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1802-1829

Instructions:

1. Calculator permitted.
2. Circle the correct answer.
3. Transfer your answers to the answer form.
4. The time limit for this Abel Math Contest is
30 minutes

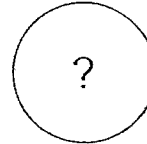
1. How many even whole numbers are prime numbers?
A. 0 B. 1 C. 2 D. 3
2. Every one of the following is a factor of 2007 *except*
A. 3 B. 9 C. 12 D. 223
3. A whole number is multiplied by 16. The product could *never* be
A. 0 B. 48 C. 72 D. 80
4. $1000 \times 100 \times 10 \times 1 \times 0.1 \times 0.01 \times 0.001 =$
A. 0 B. 0.1 C. 1 D. 10
5. $12 : 3 = 20 : ?$
A. 4 B. 5 C. 6 D. 8
6. What is the square of 4?
A. 2 B. 8 C. 16 D. 44
7. The tens' digit of a two-digit number is 5. Round this number to the nearest hundred.
A. 0 B. 50 C. 100 D. 150
8. Owen was supposed to meet Janelle at 12:13 P.M.
If Janelle arrived half an hour early, then she arrived at
A. 11:43 AM B. 11:53 AM C. 11:43 PM D. 12:43 PM
9. What is the mean of 6, 60, and 600?
A. 666 B. 333 C. 222 D. 111
10. Of the following whole numbers, which has the fewest number of factors?
A. 6 B. 9 C. 17 D. 51



11. In how many different ways can the letters in the word MATH be arranged?
(Example: Two possible arrangements are THAM and HATM.)

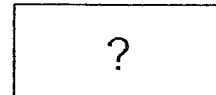
- A. 4 B. 6 C. 12 D. 24

12. In a circle with a diameter of 20, what is the length of a radius?



- A. 5 B. 10 C. 20 D. 20π

13. The perimeter of a rectangle is 20. The width of this rectangle is 4. What is the length?



- A. 5 B. 6 C. 16 D. 24

14. What is the ones' digit in the product of 987 and 789?

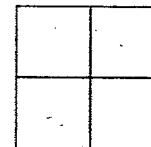
- A. 1 B. 3 C. 7 D. 9

15. The number of sides of a pentagon multiplied by the number of vertices of a hexagon equals

- A. 10 B. 20 C. 30 D. 40

16. How many different rectangles does this diagram contain?

- A. 4 B. 5 C. 9 D. 10



17. If 5 gargantuas are equal to 3 grecos, then 45 grecos are equal to ? gargantuas.

- A. 27 B. 30 C. 47 D. 75

18. February 12, 2007 was the day the Vancouver Olympic Countdown Clock started. How many days prior to the opening ceremonies of the Olympics (February 12, 2010) did the clock begin.

- A. 1094 B. 1095 C. 1096 D. 1097



19. Barbara has a box of jellybeans. It contains 24 candies: 10 red, 4 green, 8 black and 2 yellow. If she reaches in without looking, what is the probability that her first candy will be black.

- A. $\frac{1}{12}$ B. $\frac{2}{12}$ C. $\frac{4}{12}$ D. $\frac{5}{12}$



20. A man has 10 sons. Each of these sons has 10 sons. How many people does that make altogether?

- A. 21 B. 100 C. 101 D. 111

21. $0.2 \times 0.5 =$

- A. 1 B. 0.1 C. 0.01 D. 0.001

22. 4 cm equals

- A. 400m B. 40m C. 0.4m D. 0.04m

23. What is the quotient of 50% of 10, and 25% of 100?

- A. 5 B. 20 C. 30 D. 125

24. What is the next number in this pattern: 13, 26, 24, 48, 46, 92, 90, ...

- A. 88 B. 118 C. 178 D. 180

25. There are twice as many boys as girls in a club. Five boys quit the club, then there was an equal number of boys and girls. How many boys were in the club to begin with?

- A. 5 B. 10 C. 15 D. 20





Abel Math Contest – 2007

Time 30 Minutes

Calculator Permitted

1. ___ **B** ___
2. ___ **C** ___
3. ___ **C** ___
4. ___ **C** ___
5. ___ **B** ___
6. ___ **C** ___
7. ___ **C** ___
8. ___ **A** ___
9. ___ **C** ___
10. ___ **C** ___
11. ___ **D** ___
12. ___ **B** ___
13. ___ **B** ___

14. ___ **B** ___
15. ___ **C** ___
16. ___ **C** ___
17. ___ **D** ___
18. ___ **C** ___
19. ___ **C** ___
20. ___ **D** ___
21. ___ **B** ___
22. ___ **D** ___
23. ___ **A** ___
24. ___ **D** ___
25. ___ **B** ___