

## 2009 MathEdge+ Contest: Beginner Level

15 problems in 30 mins. No Calculator.

Please box the answer. Only correct answer counts. No partial credit.

- 1) Evaluate the following sequence:  $1 - 2 + 3 - 4 + \dots - 98 + 99 = ?$
  
- 2) Write the next two number in this sequence: 3, 8, 11, 19, 30, 49, \_\_\_\_\_, \_\_\_\_\_.
  
- 3) I am thinking of three odd numbers, each less than 20.  
I multiplied them all together, and then added 7.  
Which one of the following could be my answer?

231	772	5877	9268
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- 4) What is the 2-digit number equal exactly twice the sum of its digits?
  
- 5) Given that A, B, C, and D represent a different whole number in the table below, what would be the value for the “?” number?

A	B	C	D	10
A	C	D	A	9
A	C	C	B	9
B	C	D	B	11
5	11	14	?	

- 6) If today is April 16, the 27th day after tomorrow will be \_\_\_\_\_.
  
- 7) How many 3-digit numbers begin with an odd digit and end with an even digit?
  
- 8) I am a mystery four-digit number. I have a one in my thousands place, and a two in my hundreds place. I am a palindrome. (A palindrome reads the same, forwards and backwards). The words “pop” and “level” are palindromes. The numbers “747” and “842248” are palindromes.) What number am I?

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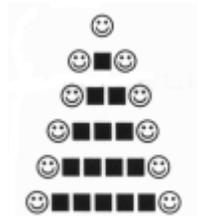
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9) Cara is 12 years old, Alexis is 3 years younger than Cara, and Sara is 2 years younger than Alexis. If Cara's mom is 4 times as old as Cara, how much older is Cara's mom than Sara?

10) A kangaroo chases a rabbit, which starts 180 feet ahead of the kangaroo. For every 11-foot leap of the kangaroo, the rabbit makes a 5-foot leap. How many leaps will the Kangaroo have to make to catch up with the rabbit?

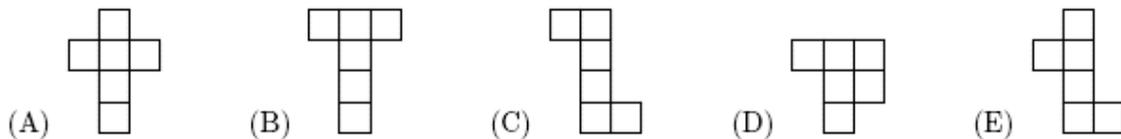
11) The picture below has six rows. If this pattern were continued downward to have 12 rows, how many more squares than happy faces would there be in the picture?



12) What is the largest possible sum for the digit on a 24 hours digital clock? (For example the time 1:25 has a sum of 8).

13) Bob and Mindy are brother and sister. Bob has as many brothers as sisters. Mindy has twice as many brothers as sisters. How many boys and how many girls are in the family?

14) Which figure cannot be folded to make a cube?



15) Two parking meters are pictured with the times left as shown. How much more time does the one meter have left on it than the other?

