2019 Girls Math Competition Answer Keys with Questions

Questions

Divisibility: 1

What number between 102 and 118 is divisible by both 4 and 6?

   a) 104
   b) 106
   c) 108
   d) 110

Answer: c) 108

Geometry: 1

One angle of a right triangle measures at 40º. What are the other two angle measurements?

   a) 40º, 40º
   b) 90º, 40º
   c) 50º, 80º
   d) 90º, 50º

Answer: d) 90º, 50º

Average: 2

Five friends each have $2. Together with a sixth friend, the six of them have an average of $12 each. How much money does the sixth friend have?

   a) $62
   b) $72
   c) $60
   d) $12

Answer: a) $62

Max has taken 3 tests with the scores of 85, 74, and 90. What is the lowest score he can get on his next test to raise his test average?

a) 79
b) 81
c) 83
d) 84

Answer: d) 84

Time: 1

What time is 237 minutes past 4:45 p.m.?

a) 7:32 pm
b) 7:58 pm
c) 8:17 pm
d) 8:42 pm

Answer: d) 8:42 pm

Scaling: 1

Tallahassee is about 950 miles from New York City. Using this map and scale, what state is 600 miles away from Tallahassee?

a) North Carolina
b) South Carolina
c) Virginia
d) New Jersey

Answer: c) Virginia

https://drive.google.com/file/d/12OyLtT7fYGUpoeSE-JE4xvDcHdV7kZF1/view?usp=sharing

Counting: 3

Sandy writes every whole number from 1 to 100 without skipping any numbers. How many times does Sandy write the digit "3"?

   a) 3
   b) 19
   c) 33
   d) 20

Answer d) 20

If 34 + 16 + 22 + 28 + 31 + 19 + 17 + 33 + 29 + 21 + 26 + 24 + 32 + 18 + 40 + N = 400,
What is the value of the counting number N?
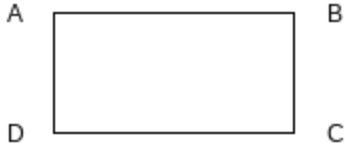
   a) 28
   b) 10
   c) 40
   d) 32

Answer b) 10

Lex had 20 pets. He had 7 dogs, 6 cats, 2 goats, and 5 monkeys. Then, 3 dogs, 3 cats, and 1 goat each had 3 babies each. How many pets does Lex own now?

   a) 32
   b) 41
   c) 29
   d) 30

Answer b) 41

Perimeter: 2

Lee walks along the edges of a rectangular pool (shown) from point A to B to C to D, a distance of 56 meters. Marina walks around the edges of the same pool from B to C to D to A, a distance of 52 meters. What is the perimeter of the pool, in meters?

    a) 32 meters
    b) 54 meters
    c) 72 meters
    d) 24 meters

Answer c) 72 meters

Four identical squares, each with a perimeter of 12 in., are put together as shown to make one big square. What is the perimeter of the big square?
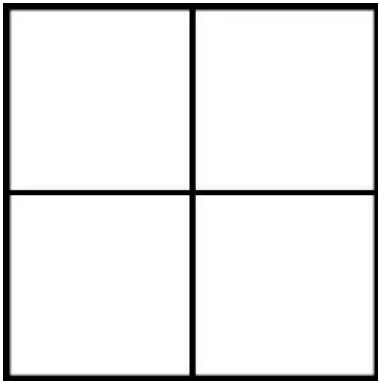
    a) 24 in.
    b) 48 in.
    c) 12 in.
    d) 15 in.

Answer: a) 24 in.

Factors: 3

In a class of 25 students, 14 students like vanilla ice cream and 12 like chocolate ice cream. However, 3 students do not like either flavor. How many students like both vanilla and chocolate ice cream?

    a) 2
    b) 4
    c) 8
    d) 3

Answer : b) 4

What is the greatest odd factor of 100?

    a) 25
    b) 50
    c) 20
    d) 15

Answer: a) 25

Which of these numbers has the most whole number factors?
    a) 3
    b) 5
    c) 8
    d) 9

Answer: c) 8

Arithmetic: 6

If I double the number of pens in my backpack and add 6, I get 20. How many pens do I have in my backpack?

    a) 6
    b) 7
    c) 14
    d) 8

Answer: b) 7

Gas costs $5.25 per gallon where Jordin lives, and her truck uses one gallon of gas to drive 12 miles. If Jordin drives 1,000 miles per week, how much does it cost for her gas?

   a) $349
   b) $435.75
   c) $437.50
   d) $494.25

Answer: c) $437.50

When Sarah buys 5 candies, she is given 2 for free. If each candy costs 30 cents, how many candies can she get with $4.30?

   a) 14
   b) 16
   c) 18
   d) 20

Answer: c) 18

What is the remainder when 73 + 26 + 10 + 57 + 44 + 5 is divided by 10?

   a) 0
   b) 7
   c) 3
   d) 5

Answer: d) 5

Lindsey bought 5 dog treats for her dog, Big Bertha, for $8.77. If she originally had $20, and each dog treat is bought individually, how many can she buy in total?

   a) 10
   b) 11
   c) 12
   d) 24

Answer: b) 11

In this addition problem, different letters represent different digits. What digits do A,B,C, and D represent?

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  7 B 4 1
    9 C 7
+ A 2 6 D
1 1, 1 1 1
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 a) A = 2, B = 9, C = 0, D = 3
 b) A = 3, B = 6, C = 5, D = 2
 c) A = 8, B = 1, C = 7, D = 0
 d) A = 1, B = 2, C = 8, D = 3

Answer: a) A = 2, B = 9, C = 0, D = 3