



Spirit of Math[®]

s c h o o l s


February 2014 Grade Three Mathematics Contest

Please observe the following instructions:

- 1) You have 45 minutes to write the contest.
- 2) The contest is multiple-choice with four choices for each question. Write the CAPITAL letter of the answer you choose on the line to the right of each question.
- 3) Each question answered correctly is worth one mark, and the sum of the correct answers is the score.
- 4) Marks are not taken off for wrong answers.
- 5) No calculators are allowed.

Student Name: _____

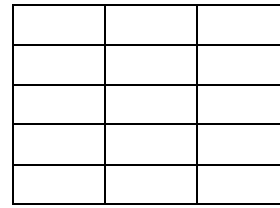
Score: / 30

- 1) $5+16+25+17+4+3=$
 A) 30 B) 50 C) 70 D) 90 _____
- 2) Joanne baked three dozen cookies for the bake-a-thon! How many cookies was that?
 A) 12 B) 24 C) 36 D) 39 _____
- 3) Thirty cheerful students making angels in the snow. All but 18 ran inside, leaving only _____.
 A) 2 B) 8 C) 12 D) 18 _____
- 4) The number of days in June minus the number of days in 2 weeks equals?
 A) 14 B) 15 C) 16 D) 23 _____
- 5) All 15 guests at my spectacularly spooky Halloween party dressed up in orange and black. If 12 of them wore orange and 8 wore black, how many wore both colours?
 A) 5 B) 8 C) 12 D) 15 _____
- 6) Which of the following shapes has the greatest number of sides?
 A) Trapezoid B) Pentagon C) Square D) Hexagon _____
- 7) Bronwyn was reading her book *1001 Ways to Drive Your Teacher Crazy*. She started at the top of page 13. If she finished reading at the bottom of page 59, how many pages did she read? 
 A) 13 B) 37 C) 46 D) 47 _____
- 8) At Piano Palace, all of the children play duets with each other! If there were 11 children, and they all played one duet with each other, how many duets were played that day?
 A) 11 B) 55 C) 110 D) 121 _____
- 9) $3 \times 2 \times 5 \times 2 \times 5 \times 2 =$
 A) 60 B) 300 C) 400 D) 600 _____
- 10) At the dog show, Fifi the poodle did 8 tricks, Stevie the St. Bernard did 5 tricks, and Goldie the Golden Retriever did 11 tricks. What was the average number of tricks performed?
 A) 5 B) 8 C) 11 D) 24 _____
- 11) Which of these fractions is **not** equivalent to one half?
 A) $\frac{2}{4}$ B) $\frac{12}{24}$ C) $\frac{50}{100}$ D) $\frac{199}{200}$ _____
- 12) Jonathan is 5 years older than Liam, who is half as old as Paul. If Paul is 12 years old, how old is Jonathan?
 A) 17 B) 16 C) 11 D) 7 _____



13) Nickey wants to visit Ninnie's house. If Nickey can travel only East and North, how many different pathways can he travel on the following 3 x 5 grid?






Nickey



A) 56 B) 55 C) 45 D) 35 _____

14) Tomorrow is Sunday. Two days before 7 days after today is my birthday. On what day of the week is my birthday?
 A) Sunday B) Tuesday C) Thursday D) Friday _____

15) Which number comes next in the pattern: 1, 4, 9, 16, 25, 36, _____
 A) 49 B) 45 C) 38 D) 22 _____

16) Find the picture that matches this shape:  if it was **flipped** upside down.
 A)  B)  C)  D)  _____

17) $3! \div 2! = ?$ (Hint: $4! = 4 \times 3 \times 2 \times 1$)
 A) 3 B) 2 C) 1 D) 0 _____

18) Matthew was polishing his coin collection when he realized two of his coins were missing! Usually, the value of Matthew's coins is \$1.17. Right now, the value is 82¢. What two coins are missing?
 A) A penny and a nickel B) A nickel and a dime C) Two dimes D) A dime and a quarter _____

19) At the Mini Olympics, 4 contestants raced to the finish line. Sally finished right before Joe. Michael finished right after Joe. Lucy did not win the race. Who came in second?
 A) Joe B) Lucy C) Michael D) Sally _____

20) Ringa is practicing for the drumming competition. She wants to practice an average of 3 hours each day this week! If she practices 3 hours on Monday, 3 hours on Tuesday, 1 hour on Wednesday, 5 hours on Thursday, 1 hour on Friday, and 3 hours on Saturday, how many hours will she need to practice on Sunday?
 A) 7 hours B) 5 hours C) 3 hours D) 1 hour _____

21) I have a big pile of Halloween treats in my paper bag! I have 6 chocolate bars, 7 gumballs, 8 packages of licorice, and a toothbrush. If I pull out items without looking, how many items must I take out to be sure I have at least one gumball?
 A) 6 B) 14 C) 16 D) 21 _____

22) Jill is cutting up her Fruit-By-The-Metre snack into pieces using parallel cuts, to share with 4 friends. If each cut takes her 5 seconds, how long in total will it take her to cut it up?

- A) 15 seconds B) 20 seconds C) 25 seconds D) 30 seconds

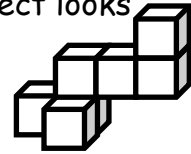
23) Lisa's secret code is a three-digit palindrome that is divisible by 3. When you subtract 20 from Lisa's secret code, it turns into a perfect square. Which of the options below could be Lisa's secret code?

- A) 141 B) 164 C) 242 D) 363

24) At the Pentagon Pizza Palace, Ella ordered a 24-slice pentagonal pizza! Her friends ate half of it, then her parents ate half of what was left. Ella and her brother split the rest evenly. How many slices of pizza did Ella get?

- A) 3 B) 6 C) 10 D) 12

25) For his abstract art project, Arthur stuck a bunch of giant cubes together! If it took one entire glue stick to glue one cube to another, and his art project looks like the diagram on the right, how many glue sticks did Arthur use?



- A) 5 B) 6 C) 7 D) 8

26) Which of the following numbers is the **least**?

- A) -44567 B) -44576 C) -44675 D) -44765

27) On January 1st, the temperature was 6°C at noon. Then the temperature dropped 6 degrees at 6 p.m. The temperature climbed 3 degrees on January 2nd at noon. Then it dropped 6 degrees at 6 p.m. and climbed 3 degrees at noon on January 3rd. If the temperature continues to rise and drop in this manner all month long, on what day will it **first** reach -12°C?

- A) January 4 B) January 5 C) January 6 D) January 7

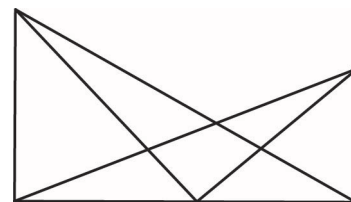
28) Half of a third of a quarter of 48 hours is how many hours?

- A) 2 B) 3 C) 4 D) 12

29) Myra likes the number 29 but does not like the number 21. She likes 83 but does not like 84. She likes 97 but does not like 91. Which if the following numbers does Myra like?

- A) 39 B) 41 C) 49 D) 87

30) How many triangles of all sizes are in this diagram?



- A) 17 B) 18 C) 19 D) 20

