2019 Southern Nevada Girls Math Tournament

Grade 4 Contest
General Round

Name: _____

RULES

1. The General Round consists of 25 problems.
2. The General Round must be completed individually.
3. You will have 40 minutes to complete the General Round.
4. You will receive 1 point for each correct answer.
5. There is no penalty for incorrect answers.
6. You may NOT use a calculator on this round.
7. Answers are to be written on the provided lines. Units are not required.

Score: _____/25 pts

1. _____ Max always walks at a speed of 5 miles per hour. How many minutes will it take him to walk 7 miles?

2. _____ A car is travelling at 75 miles per hour, how many miles will the car travel in 5 hours and 30 minutes.

3. _____ Mark goes to the market to buy lettuce, apples, and carrots. An head of lettuce costs $3.19, an apple costs $1.49, and a carrot costs $0.99. How much does Mark pay if he wants one head of lettuce, one apple, and one carrot?

4. _____ In a right triangle, one of the angles is 63 degrees. What is the measure of the unknown angle?

5. _____ a @ b is equal to $(a + b) * 2 - 3$. What is 4 @ 7?

6. _____ Amandla, Bartholomew de las Casas, and Cuffs were in a race. If exactly two statements are true, how many ways could they have placed?
i. Bartholomew de las Casas beat Amandla
ii. Bartholomew de las Casas got second
iii. Cuffs got third

7. _____ If $a + a + a = 60$
$b + a + b = 0$
$b + a + c = 20$
$c + d + d = 0$
Then what does d equal?

8. _____ Bikters been a bad boy and destroyed two fifths of a fence. If the fences surface area was 360 meters, how much area of the fence did Bikter destroy?

9. _____ Hazel Osio listens to "The 7th element", a 3 minute song by The Vitas, as often as she can. She has listened to this song for a total of 12 days, 18 hours, and 42 minutes consecutively. How many times has Hazel Osio listened to the song?

10. _____ In an intense game of chess between Honey Blue Blue and Red Flanders, there are rabid chess fans who each pick a side. At the start of the match, there were 30 more fans wearing blue hats than red hats. During the match, 6 fans change their hats from red to blue. After that, 5 fans with blue hats left the match out of boredom. How many more fans were wearing blue hats than red hats at the end of the game?

11. _____ If Hikmets class starts at exactly 4:20 pm and ends at exactly 5:06 pm every day, how many minutes do you spend every day in Hikmets class?

12. _____ Sir Eshan the rich kid has $1,000. If he spends $150 on his mom and then $300 on his dad, how much money does he have left to spend on himself?

13. _____ What is the probability of rolling even numbers on a regular die on 2 consecutive rolls?

14. _____ The four-digit number 404A is divisible by 9. What is the value of $404A/9$?

15. _____ One day in Burnt Corn, Alabama (a real city, we swear), the high temperature was 12 degrees higher than the low temperature. The high temperature was also the low temperature times three. What is the low temperature for the day in the actually real city of Burnt Corn, Alabama?

16. _____ A muscular man with black hair tells you, "You're going to love this." Suddenly, the mans hair starts growing at a rate of 0.1 inches per second. If the mans hair keeps growing for 3 minutes and 21 seconds, by how many inches does his hair grow?

17. _____ What is the side length of a square whose area is numerically equal to its perimeter?

18. _____ Brad is thoroughly enjoying his Vitamin Water. He wants to buy as much Vitamin Water as possible, but it only comes in packs of 12 bottles. Each pack of Vitamin Water costs $8, and Brad only has $35. How many bottles of Vitamin Water can Brad buy?

19. _____ A man has a plan to ban cans from the grand Japan dam. I am not a fan of the mans plan to ban cans, so I cram and slam cans onto the dam. I also demand Dennys Grand Slams with Fanta cans. The man bans cans, so I slam and cram Fanta cans onto the dam. If the dam can handle 300 cans, and I am able to snag 10 cans per Grand Slam, and each Grand Slam costs $10, how much money do I plan to spend to slam and cram cans onto the dam until it cant handle them?

20. _____ Irelynn and Scotlynn are sisters. Scotlynn is in love with Jack, but Irelynn cant stand Jack. The three go to the movies together and spot three seats to sit on. If Irelynn cant sit next to Jack, how many possible seating arrangements are there?

21. _____ I have a large number of Bambas. I want more Bambas. In order to triple my amount of Bambas, I need to gain 320 more Bambas. How many Bambas do I currently own?

22. _____ Suppose that a $ b $= (ab)/(a+b)$. Compute 2 $ (1 $ 1).

23. _____ Genghis Khan has run into a gaming conundrum. After removing too many enemies, he finds that the rate of rare drops has decreased significantly. To be successful in conquering the game, Genghis Khan needs at least 264 rare drops. An enemy has exactly 5 rare drops. Genghis Khan is able to find 24 enemies in his current area of the map. How many more enemies does Genghis Khan need to find elsewhere on the map to conquer the game?

24. _____ Sans has an unhealthy number of bones. He can separate his bones into piles of 2, 3, 4, 5, 6, 7, 8, 9, and 10. What is the least possible number of bones that Sans has?

25. _____ Nairo and Light are playing Super Smash Bros. There are 750 characters. If Nairo only plays 300 characters and Light plays 250 characters, of which none are the same as Nairos, how many ways can a new player choose 2 distinct characters that Nairo nor Light plays?

2019 Southern Nevada Girls Math Tournament

Grade 4 Contest
Target Round

Name: _____

RULES

1. The Target Round consists of 8 problems.
2. The Target Round must be completed individually.
3. You will have 6 minutes to complete each pair of questions.
4. The Target Round consists of 4 pairs, or 8 questions.
5. You will receive 2 points for each correct answer.
6. There is no penalty for incorrect answers.
7. You may use a calculator on this round.
8. Answers are to be written on the provided lines. Units are not required.

Score: _____/16 pts

1. _____ Megan goes to a sandwich shop for breakfast. At the sandwich shop, there are 3 types of bread, 4 types of cheese, 8 types of meat and 5 types of drinks. How many different combinations of a sandwich and a drink can Megan have?

2. _____ In a circle with a circumference of 300 meters, how many seconds will it take a motorcycle to travel completely around it if the motorcycle travels 15 meters every second?

3. _____ Biktor gets an allowance of $2 every 15 minutes. How much money will Biktor have in the first second of February if he starts getting his first allowance on the first second of January?

4. _____ Zendaya is going to the store. If Zendaya buys 5 pairs of shoes and 4 pairs of pants for $425. Zendaya then gets sick of her clothes the next day and being rich, she buys 5 pairs of pants and 4 pairs of shoes for $475. If each pair of shoes cost the same and each pair of pants cost the same, how much does one pair of pants and one pair of shoes cost, together?

5. _____ If $x = 2019$, find $5x - 5x + 5x - 2 + 6x - 6x - 5x$.

6. _____ What is $1+1+(1+1+1)+(1+1)*(1+1+1+1)*(1+1)+(1+1)*(1+1+1+1+1+1+$
$1+1+1+1+1+1+1)+1+1+1+(1+1+1+1+1+1+1+1+1+1)+(1+1+1+1)$?

7. _____ FIFA is having a super cool soccer tournament, where they want 10 teams to play 4 matches each. How many matches should be played? (Note: 2 teams play in a match at a time)

8. _____ Jerika always walks at a speed of 20 miles per hour and lives 89 miles away from the store. How many minutes will it take Jerika to reach the store?

2019 Southern Nevada Girls Math Tournament

Grade 4 Contest
Team Round

Team Name: _____

RULES

1. The Team Round consists of 10 problems.
2. The Team Round must be completed in teams of up to 4.
3. Your team will have 20 minutes to complete the Team Round.
4. Your team will receive 1 point for each correct answer.
5. There is no penalty for incorrect answers.
6. You may use a calculator on this round.
7. Answers are to be written on the provided lines. Units are not required.

Score: ____/10 pts

1. _____ Lois Price is a baker and she has baked a certain amount of cupcakes. If she puts her cakes in rakes of 4, there will be 3 left over. If she puts her cakes in rakes of 5, there will be 2 left over. If she puts her cakes in rakes of 6, what is the least amount of cupcakes that Lois could have baked.

2. _____ It takes an average child 20 minutes to finish math homework, 30 minutes to finish science homework, 1 hour to finish reading homework, and 20 minutes to finish history homework. What percent of a childs day is dedicated to finishing homework? Round your answer to the nearest percent.

3. _____ If $x + 2y + z = 11$, $2x + y + z = 16$, and $x + y + 2z = 12$, what is the value of $x - y$?

4. _____ A "word" is some letters with at least one vowel and one consonant. How many two letter "words" are there? (Vowels consist of a,e,i,o or u)

5. _____ Lil Raf needs a beat for his new 2 minute song. Hakkan charges $2.25 for every 20 seconds, Kyler charges $3.50 for every 30 seconds, and David charges $1.80 for every 15 seconds. Who will give him the cheapest price?

6. _____ What is the sum of all perfect squares between 5 and 30?

7. _____ James and Bobbee love to eat bees. James can eat 32 bees in one hour and Bobbee can eat 128 bees in one hour. How long did James start eating before Bobbee if Bobbee ate as many bees as James after 8 hours? (Please do not be like Bobbee and James; do not eat bees.)

8. _____ What is the largest number that is less than 2019 and divides 2019, but does not divide 1919?

9. _____ Bob has baked some brownies to bring to his neighborhood friends. He plans to cut the brownies into unequal sizes. The longer side of the pan is cut in the ratio of 3:4 and the shorter side is cut into the ratio of 1:3. The biggest slice has a perimeter of 48 inches and the smallest has a perimeter of 26 inches. What is the area of the brownie pan?

10. _____ Mateowes three daughters, from oldest to youngest, are Hikmeta, Hillary Clinton, and Laesa. The difference between the ages of Hikmeta and Hillary Clinton is the same as the difference between the ages of Hillary Clinton and Laesa. If the sum of the three ages is 39, how old is Hillary Clinton?