TEST NAME: **NAMSIM11314ACED.1**
TEST ID: **134984**
GRADE: **09**
SUBJECT: **Mathematics**
TEST CATEGORY: **My Classroom**

Student:

Class:

Date:

1. A car rental company charges $45.95 per day, plus $0.35 per mile. Rachel rented a car for two days and was charged $117.10. How many miles did Rachel drive the car?

   A. 25 miles

   B. 72 miles

   C. 117 miles

   D. 203 miles

2. The length of a room is 4 feet less than twice its width. The perimeter of the room is 58 feet. What is the length of the room?

   A. 19 feet

   B. 18 feet

   C. 17 feet

   D. 16 feet

3. Philip is assigned to read a book for his literature class that is 250 pages long. He reads at a rate of 30 pages per hour. If he can only read for 2 hours per day, how many days will it take him to finish the book?

   A. 4 days

   B. 5 days

   C. 8 days

   D. 9 days

4. Robert takes medicine for an ear infection. There are 250,000 bacteria present when he begins taking the medicine, and 35% of the bacteria are destroyed every hour. How many hours will it take for 70% of the original bacteria to be destroyed?

   A. 4 hours

   B. 3 hours

   C. 2 hours

   D. 1 hour

5. An electrician charges $42 per hour. He estimates that he will need $628 in materials for a project and the total cost of the project will be $1,384. How many hours does the electrician expect the job to take?

   A. 18 hours

   B. 33 hours

   C. 42 hours

   D. 48 hours

6. Martha wants to buy a new bike that costs $79, including tax. She currently has $15 saved. She began a dog walking business to earn the remaining money needed to buy the bike. She charges $5 for each dog she walks. What is the fewest number of dogs that Martha needs to walk to have enough money to buy the bike?

   A. 12

   B. 13

   C. 18

   D. 19

7. Michael earns $900 per month, plus 5% commission on all his sales over $750. What is the minimum amount of sales Michael must have to earn at least $2,500 in a month?

   A. $17,000

   B. $17,750

   C. $32,000

   D. $32,750

8. The lengths of the sides of triangle *PQR* are consecutive even integers. The perimeter of triangle *PQR* is 42 cm. What is the length of the longest side?

   A. 14 cm

   B. 16 cm

   C. 18 cm

   D. 20 cm

9. The perimeter of a rectangle is 28 inches. The length is 6 less than 3 times the width. What is the length of the rectangle?

   A. 5 inches

   B. 8 inches

   C. 9 inches

   D. 12 inches

10. Sarah purchased 2 tickets to a movie and a bucket of popcorn. The bucket of popcorn cost $7.00. Sarah paid a total of $22.00. How much did each movie ticket cost?

    A. $4.00

    B. $7.50

    C. $11.00

    D. $14.50

11. Joe wants the perimeter of his rectangular garden to be, at most, 76 feet. He plans on making the length 22 feet. What is the maximum width of his garden?

    A. 14 feet

    B. 16 feet

    C. 19 feet

    D. 27 feet

12. At practice, Jaye ran a mile in 13 minutes and 45 seconds. She improved her time by 30 seconds at each track meet she ran in. How many track meets occurred before her time dropped below 9 minutes and 30 seconds?

A. 4

B. 7

C. 8

D. 9

13. The sum of three consecutive odd integers is 105. What is the value of the smallest integer?

A. 31

B. 33

C. 35

D. 37

14. A rectangle has a perimeter of 52 inches. The length of the rectangle is 4 inches more than its width. What is the length of the rectangle?

A. 11 inches

B. 13 inches

C. 15 inches

D. 19 inches

15. Marcus wants to exchange his American dollars to pesos before leaving on a trip to Mexico. A bank offers 13 pesos for each American dollar. The bank charges a service fee of $2.50 to exchange the money. Which equation models the number of pesos, *y*, that Marcus will receive for *x* American dollars after the service fee?

A. $y = 13x - 2.50$

B. $y = 13(x - 2.50)$

C. $y = \frac{x - 2.50}{13}$

D. $y = \frac{x}{13} - 2.50$

16. For a set of three consecutive odd integers, three times the largest integer is 7 less than twice the sum of the other two integers. What is the largest integer in the set?

A. 5

B. 11

C. 19

D. 23

17. Karen opened a savings account with $500. The money earns 0.2% interest per month. If she does not make any withdrawals or any more deposits, ***approximately*** how much money will Karen have in the account after two years?

A. $502

B. $512

C. $515

D. $525

18. Mike's coin collection has a total of 75 coins. Kevin's coin collection has three less than two times Mike's collection. Which equation models the number of coins in Kevin's collection, x?

A. $\frac{x}{2} - 3 = 75$

B. $\frac{x+3}{2} = 75$

C. $\frac{x}{2} + 3 = 75$

D. $\frac{x-3}{2} = 75$

19. A company charges $13 plus $3 per hour to rent a boat. Abigail and Monique want to rent a boat but do not want to spend more than $20 each. What is the maximum number of hours the girls can rent a boat?

A. 9 hours

B. 6 hours

C. 5 hours

D. 2 hours

20. Twice a number added to four is the same as one subtracted from the number. What is the number?

A. $^{-}6$

B. $^{-}5$

C. $^{-}3$

D. $^{-}1$

21. The length of a rectangular backyard is 6 more than the width of the backyard. The perimeter of the backyard is 44 feet. What is the area of the backyard?

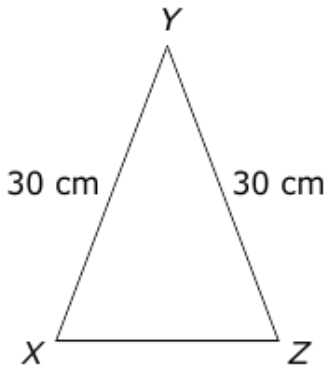
A. 112 square feet

B. 187 square feet

C. 264 square feet

D. 475 square feet

22. In the triangle below, $m\angle X = 4x - 10$ and $m\angle Y = 2x$.



What is the measure of $\angle Z$?

A. 20°

B. 30°

C. 40°

D. 70°

23. The cost to rent a truck for a day is $42.95, plus $0.18 per mile. How many miles did George drive the truck if he paid $54.11 to rent the truck?

A. 54 miles

B. 62 miles

C. 97 miles

D. 239 miles

24. Julie has $48 to spend at a carnival. The carnival charges $8 for admission and $5 per ride. What is the maximum number of rides Julie can go on?

A. 3

B. 4

C. 8

D. 9

25. Terrence and Quentin picked apples. Terrence picked 3 times as many pounds of apples as Quentin. Together they picked 28 pounds of apples. How many pounds of apples did Terrence pick?

A. 7 pounds

B. 9 pounds

C. 19 pounds

D. 21 pounds

26. When Karen bought food, her bill was $108.29 before taxes. The bill was $110.46 after taxes. What was the tax rate for the food?

A. 1.0%

B. 1.5%

C. 2.0%

D. 2.5%

27. The difference in two complementary angles is 21°. What is the measure of the larger angle?

A. 21°

B. 34.5°

C. 55.5°

D. 69°

28. The sum of three consecutive integers is 51. What is the value of the largest integer?

A. 16

B. 17

C. 18

D. 19

29. A plumber charges a fixed rate of $40 per job plus $10 for each hour, h, that he works at the job. Which equation models the total amount the plumber charges, y, if he works h hours?

A. $y = 30h$

B. $y = 50h$

C. $y = 10h + 40$

D. $y = 40h + 10$

30. John is saving to buy a television that costs $1,250. John currently has $200 saved. He plans to save an additional $50 each week. How many weeks will it take John to have $1,250 saved?

A. 6 weeks

B. 8 weeks

C. 19 weeks

D. 21 weeks

31. Alexander is raking leaves to earn money to buy a bicycle that costs $300 including tax.

- He currently has $75 and will spend $50 on supplies.
- He charges $15 per yard he rakes.

What is the fewest number of yards Alexander will have to rake to have enough money to buy the bicycle?

A. 15 yards

B. 18 yards

C. 19 yards

D. 20 yards

32. The sum of three consecutive even integers is 78. What is the value of the smallest of the three integers?

A. 20

B. 22

C. 24

D. 26

33. The difference in the measures of two supplementary angles is 76°. What is the measure of the smaller angle?

A. 14°

B. 22°

C. 28°

D. 52°

34. The admission fee to a state fair is $8.00. Each ride costs an additional $4.00. Karen only has $30.00. Which inequality could be used to determine the number of rides, x, Karen can go on?

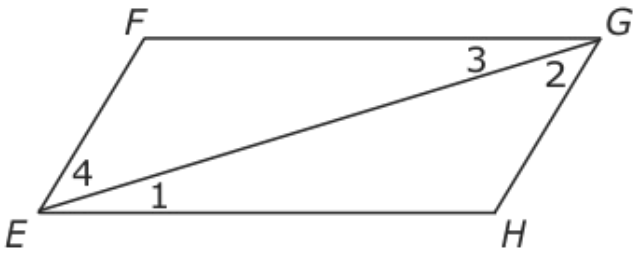
A. $12x \leq 30$

B. $4x + 8 \leq 30$

C. $8x + 4 \leq 30$

D. $12x + 8 \leq 30$

35. In parallelogram $EFGH$, $m\angle 1 = 3x - 5$, $m\angle 2 = x + 10$, and $m\angle 3 = 2x + 15$.



What is $m\angle 4$?

A. 20°

B. 30°

C. 55°

D. 85°

36. The length of a vine is predicted to increase by 3 feet each week. The vine is currently 12 feet. In how many weeks will the vine reach a predicted length of 33 feet?

A. 3

B. 4

C. 7

D. 11

37. A coat cost $68 after a 15% discount was applied to the original cost. What was the original cost of the coat?

A. $57.80

B. $78.20

C. $80.00

D. $83.00

38. A company has a budget of $1,700 for a banquet. A banquet hall charges $150 to rent a room, plus $30 per guest. What is the maximum number of guests that can attend the banquet for the costs to remain under the budget?

A. 51 people

B. 52 people

C. 56 people

D. 57 people

39. In triangle XYZ, $m\angle Y$ is 3 times larger than the $m\angle X$. The exterior angle at Z measures 120°. What is the $m\angle X$?

A. 90°

B. 60°

C. 50°

D. 30°

40. Veronica's cell phone plan costs $39.99 a month for 450 minutes. She is charged an additional $0.45 for each minute over 450 she uses. Veronica's bill last month was $95.34. How many minutes over 450 did Veronica use last month?

A. 123 minutes

B. 212 minutes

C. 573 minutes

D. 662 minutes

41. Angle *EFH* and angle *GFH* are congruent. The measure of $\angle EFH = 3x + 14$ and the measure of $\angle GFH = 9x - 10$. What is the measure of $\angle EFH$?

A. 20°

B. 26°

C. 36°

D. 52°

42. A computer repairman charges $50 to come to a home or office, plus $30 per hour of work. During one week, he visits 12 homes or offices earning $1,800. How many hours did the repairman work?

A. 22 hours

B. 40 hours

C. 42 hours

D. 58 hours