2nd and 3rd Grade
UIL A+ Elementary Math Tests

Disclaimer & Notice

These tests were created for use at past A+ Academics events. They are being shared here for reference and instructional purposes only.

Please note:

- These tests are **not official UIL releases**.
- While originally used in competition, they have **not been re-proofed** for this publication. Typos, formatting inconsistencies, or other minor errors may be present.
- Educators are encouraged to review the material carefully before reusing or distributing it.

We hope these resources are useful in supporting math enrichment and UIL preparation.

(1) Simplify:
A) 11 B) 18 C) 12 D) None of the above

(2) Which number below is even?
A) 7 B) 1 C) 19 D) None of the above

(3) A number has eight ones, four tens, and six hundreds. What is the number?
A) 846 B) 468 C) 648 D) None of the above

(4) What value is eleven less than nineteen?
A) 8 B) 30 C) 6 D) None of the above

(5) If it is in the afternoon, what time does the clock read?

A) 12:00 pm B) 4:00 pm C) 5:00 pm D) None of the above

(6) The length of a rectangle is 12 inches, and the width of the rectangle is 8 inches. What is the perimeter of the rectangle?
A) 20 inches B) 28 inches C) 40 inches D) None of the above

(7) What is the ratio of 8 chickens to 12 cows?
A) – B) – C) – D) None of the above

(8) What is the name of a polygon with 5 sides?
A) pentagon B) hexagon C) octagon D) None of the above

(9) What is the number 45,678 rounded to the nearest hundred?
A) 50,000 B) 46,000 C) 45,600 D) None of the above

(10) Hibba has 8 red marbles, 5 blue marbles, 3 green marbles, and 9 yellow marbles. How many marbles in all does Hibba have?
A) 24 B) 25 C) 26 D) None of the above

(11) Andy caught 3 fish in 15 minutes. At this rate, how many fish can Andy catch in 1 hour?
A) 12 B) 15 C) 18 D) None of the above

(12) What number should replace the in the equation 9, to make the equation true?
A) 7 B) 11 C) 8 D) none of the above

(13) What will the 9th number be in the pattern 4, 8, 12, 16, …?
A) 32 B) 34 C) 36 D) None of the above

(14) Shanaya started with 30 pieces of candy. She gave half of her candy to her sister, and then gave 5 pieces to her brother. If Shanaya eats 3 pieces, how many pieces of candy will she have left?
A) 6 pieces B) 8 pieces C) 7 pieces D) None of the above

(15) Hank has a 48 inch string he will use to make 3 bracelets of equal length. How long will each bracelet be?
A) 18 inches B) 16 inches C) 14 inches D) None of the above

(16) Which list shows the numbers ordered from least to greatest?
A) 32, 31, 30 B) 14, 33, 27 C) 35, 14, 50 D) None of the above

(17) Zayna has a jar containing 36 pickles. Zayna wants to put an equal amount of pickles into 4 smaller jars. How many pickles will be in each smaller jar?
A) 6 pickles B) 9 pickles C) 8 pickles D) None of the above

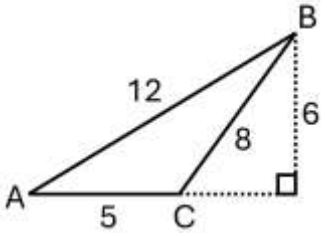
(18) 2 feet = _____ inches
A) 48 B) 12 C) 18 D) None of the above

(19) Which fraction is equal to –?
A) — B) – C) — D) None of the above

(20) Which expression below equals 16?
A) 4 + 4 + 4 + 4 + 4 B) 5 + 5 + 5 – 2 C) 6 + 5 + 4 D) None of the above

(21) The number 12 has how many different factors?
A) 12 B) 6 C) 5 D) None of the above

(22) What is the area of triangle ABC in the picture below?



A) 60 units^2 B) 40 units^2 C) 30 units^2 D) None of the above

(23) Which comparison is true?
A) 67 < 54 B) 87 > 99 C) 71 < 69 D) None of the above

(24) Melissa has three quarters, four dimes and three nickels. How much money does Melissa have?
A) $1.30 B) $1.25 C) $1.35 D) None of the above

For problems #25 - #28, please use the pictograph below.

(25) 3rd graders at McDougle Elementary School were asked what was their favorite color. According to the survey pictograph, how many students were surveyed?
A) 15 B) 100 C) 75 D) None of the above

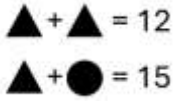
(26) 3rd graders at McDougle Elementary School were asked what was their favorite color. According to the survey pictograph, how many more students prefer the color purple over the color blue?
A) 25 B) 15 C) 10 D) None of the above

(27) 3rd graders at McDougle Elementary School were asked what was their favorite color. How many 3rd graders at McDougle Elementary School did not choose yellow?
A) 5 B) 94 C) 85 D) None of the above

(28) 3rd graders at McDougle Elementary School were asked what was their favorite color. What is the ratio of the number of students who chose green to the number of students who chose red?
A) – B) – C) – D) None of the above

(29) Jessie bought 3 packages of pink stickers and 4 packages of purple stickers. There were 12 stickers in each package. How many stickers did Jessie buy?
A) 72 B) 84 C) 96 D) None of the above

(30) What is the value of the circle in the picture below?



A) 3 B) 6 C) 9 D) None of the above

2/3 Mathematics Test A Answer Key

1) C
2) D
3) C
4) A
5) B
6) C
7) A
8) A
9) D
10) B
11) A
12) C
13) C
14) C
15) B
16) D
17) B
18) D
19) A
20) D
21) B
22) D
23) D
24) A
25) C
26) B
27) D
28) A
29) B
30) C

(1) Simplify: 24 – 10 – 7

A) 7 B) 9 C) 8 D) None of the above

(2) What is the missing number in the pattern? 78, 74, 70, _____, 62, 58

A) 68 B) 66 C) 64 D) None of the above

(3) What is the number 12,746 rounded to the nearest ten?

A) 12,700 B) 12,740 C) 12,800 D) None of the above

(4) If it 7:50 in the morning, what time will it be in 20 minutes?

A) 7:30 am B) 8:10 am C) 8:20 am D) None of the above

(5) Seven subtracted from twenty-five is equal to what value?

A) 18 B) 32 C) 17 D) None of the above

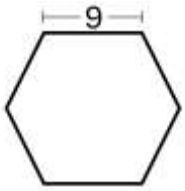
(6) Which comparison is true?

A) 123 > 131 B) 134 < 129 C) 144 > 119 D) None of the above

(7) Which number is an odd number?

A) 24 B) 18 C) 10 D) None of the above

(8) The side lengths of the shape below are all equal in measure. What is the perimeter of the shape?



A) 45 units B) 54 units C) 63 units D) None of the above

(9) Three friends have 24 sour candies. They want to share the sour candies equally among each other. How many sour candies should each friend get?

A) 12 B) 6 C) 9 D) None of the above

(10) Lucy scored 25 points at her basketball game. Meredith scored 5 points less than Lucy. Shiela scored half as many points as Meredith. How many points did Shiela score?

A) 12 B) 15 C) 10 D) None of the above

(11) What is the ratio of 18 pigs to 24 ducks?

A) – B) – C) – D) None of the above

(12) Cint has 5 quarters, 2 dimes, 5 nickels and 8 pennies. How much money does Clint have?

A) $1.78 B) $1.63 C) $1.68 D) None of the above

(13) 120 minutes = _____ hours

A) 3 B) 4 C) 2 D) None of the above

(14) What number should replace the ▲ in the equation 6 + ▲ + ▲ = 20, to make the equation true?

A) 8 B) 7 C) 5 D) None of the above

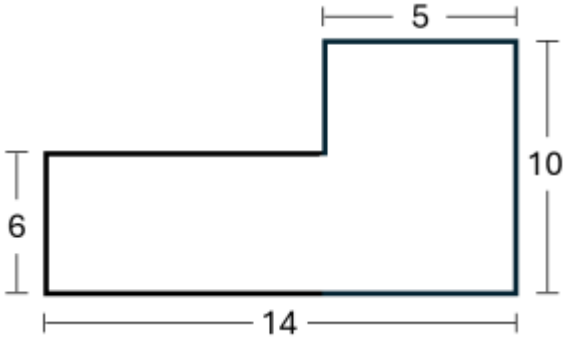
(15) Erica planted 6 rows of flower plants in her garden. If each row has 9 flower plants in them, how many total flower plants did Erica plant?

A) 18 B) 48 C) 54 D) None of the above

(16) Johnny jogged 4 miles a day. How many miles did Johnny jog in a week?

A) 11 B) 24 C) 20 D) None of the above

(17) What is the area of the shape below?



A) 84 units^2 B) 104 units^2 C) 35 units^2 D) None of the above

(18) Hema is reading a book that has 120 pages. If Hema reads 10 pages a day, how many days will it take Hema to read her book?

A) 8 B) 10 C) 12 D) None of the above

(19) Which list shows the numbers ordered from greatest to least?

A) 65, 73, 45 B) 61, 53, 88 C) 25, 32, 56 D) None of the above

(20) What is the name of a shape with 8 sides?

A) octagon B) hexagon C) decagon D) None of the above

(21) What is the standard form of)?

A) 457,281 B) 45,718 C) 45,712 D) None of the above

(22) Which of the following numbers below is not divisible by 4?

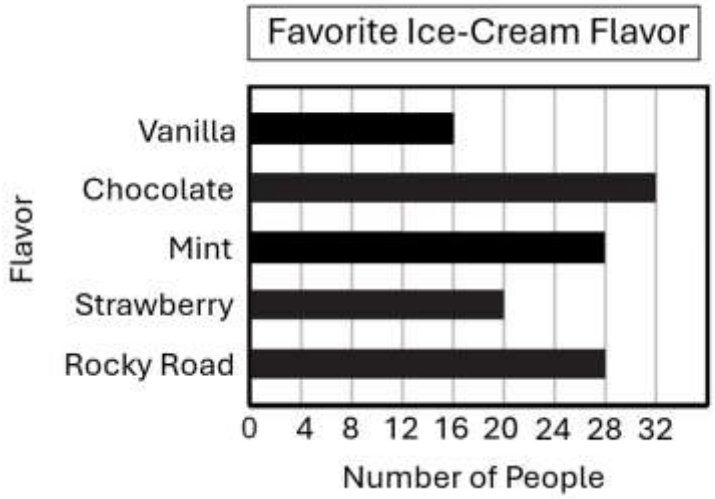
A) 18 B) 12 C) 16 D) None of the above

(23) 1 + 2 + 3 + 4 + 5 + 6 + 7 + 8 = _____

A) 34 B) 36 C) 38 D) None of the above

(24) 2, 4, 6, and 8 are some of the factors of which number?
A) 12 B) 24 C) 30 D) None of the above

For #25 - #28, please use the bar graph below.



(25) Macy asked people outside of the neighborhood grocery store what was their favorite ice-cream flavor. According to the survey bar graph, how many people liked chocolate and mint the most?
A) 50 B) 60 C) 32 D) None of the above

(26) Macy asked people outside of the neighborhood grocery store what was their favorite ice-cream flavor. According to the survey bar graph, how many more people chose rocky road than vanilla?
A) 8 B) 10 C) 12 D) None of the above

(27) Macy asked people outside of the neighborhood grocery store what was their favorite ice-cream flavor. According to the survey bar graph, how many people did not choose chocolate or strawberry?
A) 72 B) 64 C) 52 D) None of the above

(28) Macy asked people outside of the neighborhood grocery store what was their favorite ice-cream flavor. According to the survey bar graph, what is the ratio of people who chose vanilla to people who chose strawberry?
A) – B) – C) – D) None of the above

(29) Maria wrote down all the numbers from 1 through 30. How many times did Maria write down the digit "2"?
A) 13 B) 14 C) 12 D) None of the above

(30) Davis paid $2.00 for 4 apples. How much would Davis pay for 10 apples?
A) $8.00 B) $5.00 C) $6.00 D) None of the above

2/3 Mathematics Test B Answer Key

1) A
2) B
3) D
4) B
5) A
6) C
7) D
8) B
9) D
10) C
11) C
12) A
13) C
14) B
15) C
16) D
17) B
18) C
19) D
20) A
21) D
22) A
23) B
24) B
25) B
26) C
27) A
28) A
29) A
30) B

(1) Simplify: 23 – 16 + 13

A) 18 B) 20 C) 22 D) None of the above

(2) What is the missing number in the pattern? 43, 46, 49, 52, _____, 58, 61

A) 54 B) 55 C) 56 D) None of the above

(3) Fourteen thousand nine hundred twenty-seven is which number?

A) 14,927 B) 140,927 C) 1,427 D) None of the above

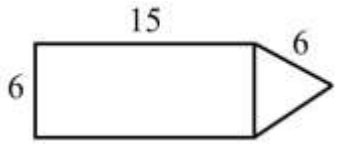
(4) Which comparison is false?

A) – > – B) – – C) – – D) None of the above

(5) Hank has 6 quarters, 4 dimes, 2 nickels and 12 pennies. Hank's dad gives him a quarter and a nickel. How much money does Hank now have in total?

A) $2.42 B) $2.36 C) $2.44 D) None of the above

(6) A rectangle and an equilateral triangle share a common side to create a pentagon. What is the perimeter of the pentagon?



A) 54 units B) 48 units C) 27 units D) None of the above

(7) How many minutes are in 3 hours?

A) 120 B) 150 C) 240 D) None of the above

(8) How many sides does a decagon have?

A) 6 B) 5 C) 10 D) None of the above

(9) What is the number 517,378 rounded to the nearest thousand?

A) 517,000 B) 518,000 C) 520,000 D) None of the above

(10) John scored 16 points in his basketball game. Steve scored 12 points more than John. Javier scored half as many points as Steve. How many points did Javier score?

A) 28 B) 4 C) 14 D) None of the above

(11) Which expression below does not have a sum greater than 40?

A) 15 + 8 + 33 B) 23 + 5 + 14 C) 14 + 15 + 16 D) None of the above

(12) If 2 bananas cost 25¢, how much will 2 dozen bananas cost?

A) $3.50 B) $3.00 C) $3.25 D) None of the above

(13) There are 455 students at Milburn Elementary School. There are 389 students at Goosbeck Elementary School. How many more students attend Milburn Elementary School than Goosbeck Elementary School?

A) 61 B) 66 C) 72 D) None of the above

(14) Which of the following is not a factor of the number 56?

A) 4 B) 14 C) 12 D) None of the above

(15) What is the circumference of a circle with a 4-feet radius?

A) ft B) ft C) ft D) None of the above

(16) If $17 + m = 22$, then what is the value of $m + 8$?

A) 13 B) 16 C) 14 D) None of the above

(17) If it is in the morning, what time was 45 minutes earlier than what the clock below reads?

A) 9:00 am B) 8:30 am C) 9:15 am D) None of the above

(18) Shantel opens her book and sees two pages numbers. The sum of the page numbers is 247. If Shantel turns to the next page in her book, what number will she see?

A) 125 B) 122 C) 127 D) None of the above

(19) What is the remainder when the number 35 is divided by the number 4?

A) 1 B) 2 C) 0 D) None of the above

(20) If and $21 - ▲ = 13$, then what is the value of + ▲?

A) 24 B) 26 C) 28 D) None of the above

(21) Which list shows the numbers ordered from least to greatest?

A) 111, 214, 199 B) 301, 411, 801 C) 745, 512, 289 D) None of the above

(22) What is the ratio of 15 monkeys to 25 zebras?

A) – B) — C) – D) None of the above

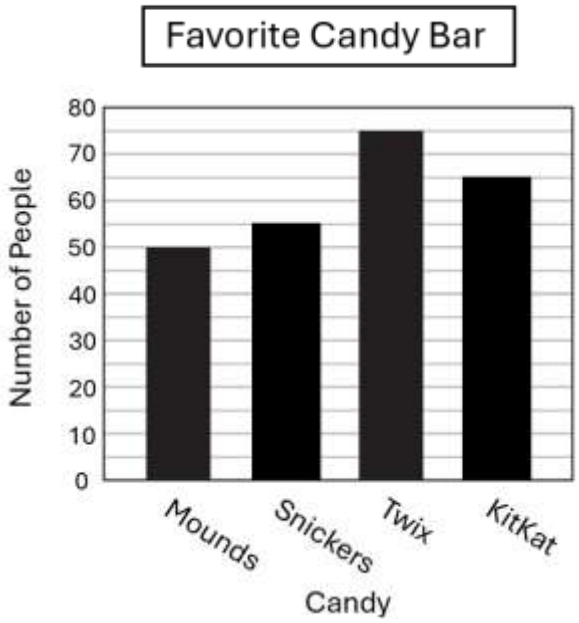
(23) Which of the following numbers is divisible by 7?

A) 84 B) 38 C) 92 D) None of the above

(24) Licorice sticks cost 40¢ each. How many licorice sticks can Jan buy with a $10 bill?
A) 25 B) 40 C) 32 D) None of the above

(25) Four friends add their ages to get a total of 54. If two of the friends are the same age of 13 and another friend is 12 years old, what is the age of the remaining friend?
A) 14 B) 15 C) 16 D) None of the above

For #26 – #28, please use the bar chart below.



(26) People at a carnival were asked what was their favorite candy bar. According to the survey bar graph, how many total people were surveyed?
A) 240 B) 250 C) 245 D) None of the above

(27) People at a carnival were asked what was their favorite candy bar. According to the survey bar graph, How many more people liked Twix and Kitkat than Mounds and Snickers?
A) 25 B) 35 C) 45 D) None of the above

(28) People at a carnival were asked what was their favorite candy bar. According to the survey bar graph, What is the ratio of the number of people that chose Mounds to the number of people who chose Twix?
A) – B) – C) – D) None of the above

(29) If $a = 8$ and $17 - a + b = 24$, what is the value of b?
A) 15 B) 9 C) 12 D) None of the above

(30) What is the perimeter of a square that has an area of 64 cm^2?
A) 28 cm B) 32 cm C) 40 cm D) None of the above

2/3 Mathematics Test C Answer Key

1) B
2) B
3) A
4) C
5) A
6) B
7) D
8) C
9) A
10) C
11) D
12) B
13) B
14) C
15) A
16) A
17) D
18) A
19) D
20) B
21) B
22) C
23) A
24) A
25) C
26) C
27) B
28) D
29) A
30) B

INVITATIONAL 2023 - 2024

A+ ACADEMICS

Mathematics

DO NOT OPEN TEST
UNTIL TOLD TO DO SO

(1) Evaluate: 15 + 4 - 16 =

A) 19 B) 3 C) 35 D) None of the above

(2) The quotient of 12 and 3 is equal to what amount?

A) 36 B) 15 C) 4 D) None of the above

(3) What is the ratio in fl oz of 4 pints to 2 quarts?

A) 1 B) $\frac{1}{2}$ C) $\frac{2}{1}$ D) None of the above

(4) 5 yards = _____ inches

A) 36 B) 180 C) 15 D) None of the above

(5) What is the perimeter of a circle with a 5-inch diameter?

A) 20π in B) 5π in C) 10π in D) None of the above

(6) How many seconds are in 1 hour?

A) 3600 seconds B) 360 seconds C) 36 seconds D) None of the above

(7) Flora collects lots of different colored flowers. 3 pink flowers, 3 yellow flowers, 3 red flowers and 3 blue flowers. How many colored flowers does Flora have in all?

A) 4 B) 8 C) 12 D) None of the above

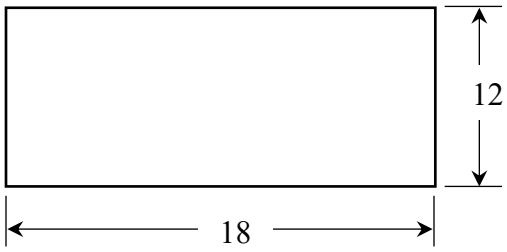
(8) How many different factors are there for 12?

A) 4 B) 2 C) 1 D) All of the above

(9) 88 ft per minute = _____ miles per hour (mph).

A) 1 mph B) 1760 mph C) 5280 mph D) None of the above

(10) What is the area of the figure to the right?



A) 30 D) None of the above

B) 60

C) 216

(11) Chocolate bars cost 230¢. How many candies can be purchased with $7.25?

A) 3 B) 4 C) 5 D) None of the above

(12) Benny owns 5 dogs. They weigh a total of 45 lbs. How heavy are each dog?

A) 45 lbs.
B) 9 lbs.
C) 5 lbs.
D) None of the above

(13) It is the annual Girl Scout Cookies sale. Sandra sold 58 boxes at $6 each. How much money did Sandra raise?

A) $58.00 B) $6.00 C) $348.00 D) None of the above

(14) Flora collects different colored flowers. She collected 3 green flowers, 3 yellow flowers, 3 red flowers and 3 blue flowers. How many different colored flowers does Flora have in all?

A) 4 B) 8 C) 12 D) None of the above

(15) Given the number pattern 2, 4, 6, 8, 10...what would be the 8th number in the pattern?

A) 14 B) 16 C) 18 D) None of the above

(16) If $12 + a = 13$, what does ***a*** equal?

A) 9 B) 1 C) 7 D) None of the above

(17) My book is open. I see two pages. The sum of the pages numbers is 159. What is the next page number?

A) 80 B) 81 C) 160 D) None of the above

(18) Karen collects photocards. She has 32 photocards. Her sister took 10 of them. Karen sold 6 of them. Karen bought 3 more. How many photocards does she have in the end?

A) 22 B) 35 C) 19 D) None of the above

(19) A tennis player competed in 5 tournaments last month. The tennis player paid $250 to compete in all the meets. How much did she pay for each meet?

A) $50 B) $20 C) $5 D) None of the above

(20) A class of 20 students were asked what was their favorite color. 10 said they liked red, 2 said they blue, and 8 said they black. How many students in the class did not like blue or black?

A) 10 B) 8 C) 2 D) None of the above

(21) What is the standard form of $1x10^3 + 2x10^3 + 1x10^2 + 4x10^1$

A) 5140 B) 3214 C) 1000 D) None of the above

(22) What is the area of the figure to the right?

A) 24 m^2

B) 36 m^2

C) 30 m^2

D) None of the above

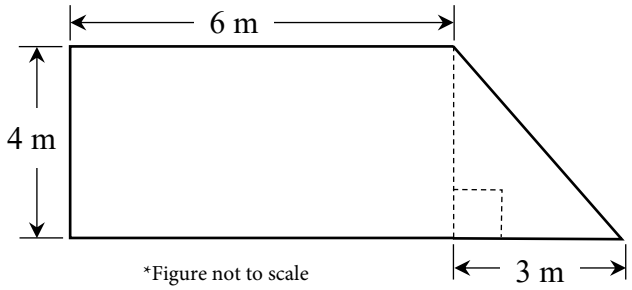


*Figure not to scale

(23) There are 32 seats in a bus. There are 68 players on the football team. How many busses does the school need to rent to take their football team to the state championship?

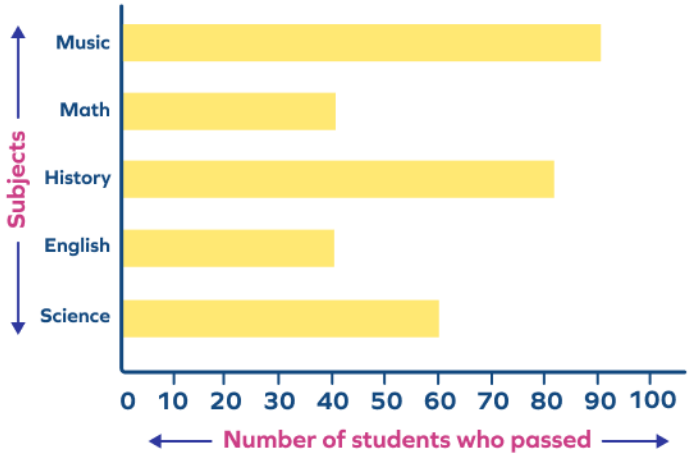
A) 1 B) 2 C) 3 D) None of the above

(24) Which comparison is **NOT** true?

A) $33 > 31$ B) $13 < 10$ C) $45 > 33$ D) None of the above

For problems #25 – #28 please use the bar chart graph below.

Assume there are 100 students and each student took all five tests



(25) Based on the bar graph, how many students passed the science exam?

A) 70 B) 50 C) 60 D) None of the above

(26) How many more students passed the History test than the English test?.

A) 40 B) 30 C) 20 D) None of the above

(27) Which test had the highest passing rate?

A) History B) Music C) Science D) None of the above

(28) If you randomly picked one of the students who took the Math test, what is the probability that the student passed the Math test?

A) $\frac{2}{5}$ B) $\frac{1}{4}$ C) $\frac{1}{5}$ D) None of the above

(29) The average weight of four adults is 170lbs. Two of the adults are each 170lbs, and the third is 190lbs. How heavy in lbs is the fourth adult?

A) 180 lbs B) 170 lbs C) 150 lbs D) None of the above

(30) If $x = 12$ and $9 - x + 11 = y$, what is the value of y?

A) 6 B) 10 C) 13 D) None of the above

2/3 Invitational 2023-2024 Mathematics Answer Key
Set B

1) B
2) C
3) A
4) B
5) B
6) A
7) C
8) A
9) A
10) C
11) A
12) B
13) C
14) A
15) B
16) B
17) B
18) C
19) A
20) A
21) B
22) C
23) C
24) B
25) C
26) A
27) B
28) A
29) C
30) D

INVITATIONAL 2021-2022

A+ ACADEMICS

Mathematics

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(1) Evaluate: 10 - 3 + 4 =

A) 17 B) 11 C) 9 D) None of the above

(2) The sum of nine and eighteen is equal to what amount?

A) 27 B) 9 C) 18 D) None of the above

(3) What is the ratio of 15 boys to 20 girls?

A) $\frac{3}{4}$ B) $\frac{4}{3}$ C) $\frac{3}{2}$ D) None of the above

(4) 3 yards = _____ feet

A) 3 B) 6 C) 9 D) None of the above

(5) What is the perimeter of a circle with a 5-inch radius?

A) 25π in B) 5π in C) 10π in D) None of the above

(6) How many seconds are in 15 minutes?

A) 60 seconds B) 900 minutes C) 900 seconds D) None of the above

(7) Michelle has 3 green pens, 4 yellow pens, 5 red pens and 6 blue pens. How many different colored pens does Michelle have in all?

A) 4 B) 18 C) 20 D) None of the above

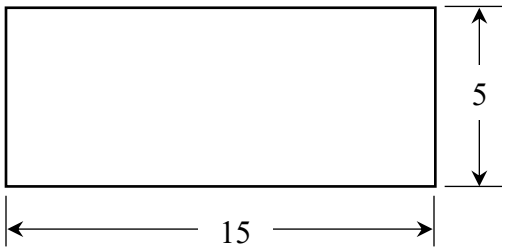
(8) How many different factors are there for 8?

A) 6 B) 4 C) 2 D) All of the above

(9) 1 mile per minute = _____ miles per hour (mph).

A) 30 mph B) 1 mph C) 60 mph D) None of the above

(10) What is the perimeter of the figure to the right?



A) 40 D) None of the above

B) 20

C) 75

(11) Sodas cost 50¢. How many candies can be purchased with $5.25?

A) 9 B) 10 C) 11 D) None of the above

(12) One puppy weighs 5 lbs. How many pounds do 4 similar puppies weigh together?

A) 20 lbs.
B) 40 lbs.
C) 15 lbs.
D) None of the above

(13) This season, a basketball game ticket cost $30, which is $6 less than last year. How much did last year basketball game ticket cost?

A) $6.00 B) $24.00 C) $36.00 D) None of the above

(14) A baker bakes a baker's dozen of cookies. How many cookies did she bake?

A) 12 B) 24 C) 13 D) None of the above

(15) Given the number pattern 3, 6, 9, 12, 15...what would be the 10th number in the pattern?

A) 27 B) 30 C) 33 D) None of the above

(16) If $15 - a = 3$, what does ***a*** equal?

A) 12 B) 13 C) 14 D) None of the above

(17) My book is open. I see two pages. The sum of the pages numbers is 245. What is the next page number?

A) 122 B) 123 C) 124 D) None of the above

(18) Elizabeth picked 40 apples. Her brother ate 6 of the apples, her dad ate 9 of the apples, she used 20 in baking. How many apples does Elizabeth have left?

A) 35 B) 20 C) 15 D) None of the above

(19) A volleyball player competed in 3 tournaments last year. The volleyball player paid $69 to compete in all the tournaments. How much did she pay for each tournament?

A) $69 B) $207 C) $23 D) None of the above

(20) In a class of 15 students, 6 said they only liked apple pie, 5 said they only liked chocolate cake, and 4 said they only liked pecan pie. How many students in the class like apple pie or chocolate cake?

A) 11 B) 10 C) 9 D) None of the above

(21) What is the standard form of $3x10^3 + 2x10^2 + 1x10^1 + 4x10^0$

A) 3214 B) 321.4 C) 32140 D) None of the above

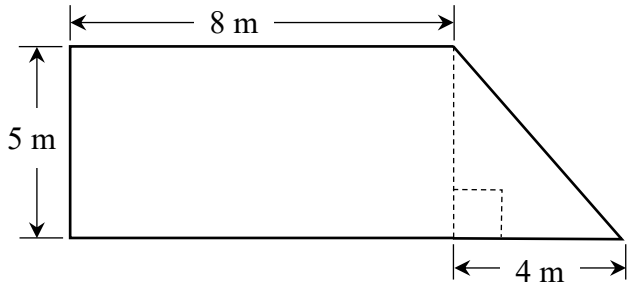
(22) What is the area of the figure to the right?

A) 10 m^2

B) 40 m^2

C) 50 m^2

D) None of the above

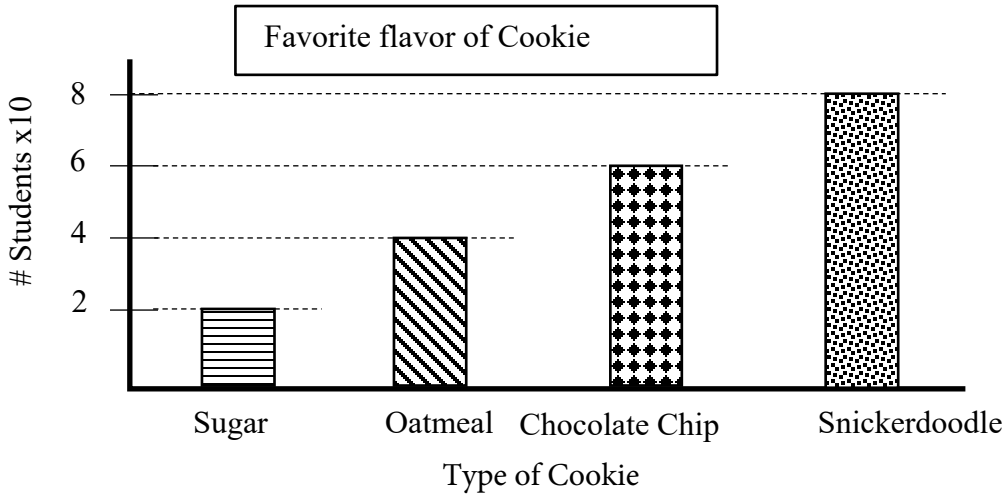


(23) There are 8 seats at each table in the cafeteria. There are 12 tables in the cafeteria. What is the maximum number of students who can sit at the tables in the cafeteria?

A) 8 B) 96 C) 80 D) None of the above

(24) Which comparison is true?
A) 25 > 28 B) 88 < 44 C) 69 > 15 D) None of the above

For problems #25 – #28 please use the bar chart graph below.



(25) Students at Houston Elementary School were asked what was their favorite flavor of cookie. According to the survey bar graph, how many total students were surveyed?
A) 20 B) 100 C) 200 D) 160

(26) Students at Houston Elementary School were asked what was their favorite flavor of cookie. According to the survey bar graph, what's the difference between the number of students who prefer Chocolate Chip and students that prefer Sugar?
A) 40 B) 20 C) 4 D) None of the above

(27) Students at Houston Elementary School were asked what was their favorite flavor of cookie. If there are 300 students at the school, how many did not respond?
A) 100 B) 200 C) 180 D) None of the above

(28) Students at Houston Elementary School were asked what was their favorite flavor of cookie. If you randomly picked one of the students that answered the survey, what is the probability that the student liked oatmeal cookies the best?
A) $\frac{1}{10}$ B) $\frac{1}{4}$ C) $\frac{2}{5}$ D) None of the above

(29) The average height of four adults is 180 cm. Two of the adults are each 170 cm tall, and the third is 185 cm. How tall, in cm is the fourth adult?
A) 180 B) 190 C) 195 cm D) None of the above

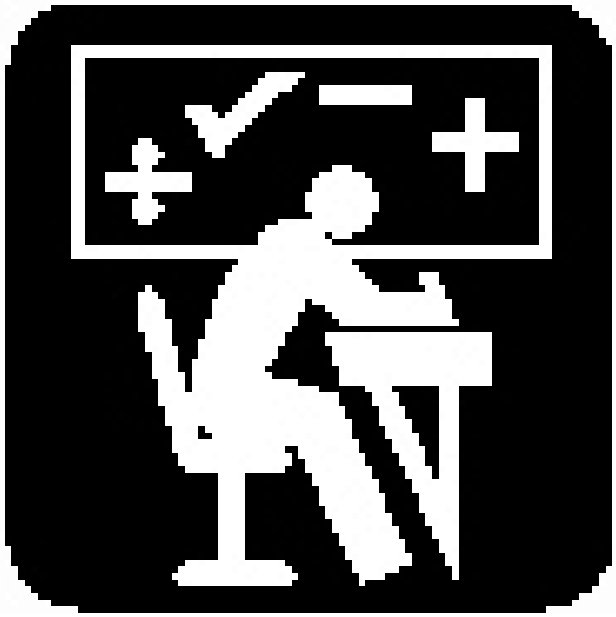
(30) If $x = 5$ and $7 + x - 11 = y$, what is the value of y?
A) 1 B) 2 C) 3 D) None of the above

4/5 Mathematics Answer Key

1) B
2) A
3) A
4) C
5) C
6) C
7) A
8) B
9) C
10) A
11) B
12) A
13) C
14) C
15) B
16) A
17) C
18) D
19) C
20) A
21) A
22) C
23) B
24) C
25) C
26) A
27) A
28) D
29) C
30) A

DISTRICTS 2022-2023

ACADEMICS



Mathematics

DO NOT OPEN TEST
UNTIL TOLD TO DO SO

(1) Evaluate: 9 + 2 - 4 =

A) 7 B) 11 C) 9 D) None of the above

(2) The product of three and five is equal to what amount?

A) 2 B) 8 C) 15 D) None of the above

(3) What is the ratio in fl oz of 1 cup to 2 pints?

A) $\frac{1}{4}$ B) $\frac{1}{2}$ C) $\frac{4}{1}$ D) None of the above

(4) 36 inches = _____ yard

A) 3 B) 1 C) 12 D) None of the above

(5) What is the perimeter of a circle with a 10-inch diameter?

A) 20π in B) 5π in C) 10π in D) None of the above

(6) How many seconds are in 1 hour?

A) 3600 seconds B) 36 seconds C) 360 seconds D) None of the above

(7) Caleb has lots of different colored bricks. 5 green bricks, 3 yellow bricks, 5 red bricks and 2 blue bricks. How many colored bricks does Caleb have in all?

A) 4 B) 15 C) 20 D) None of the above

(8) How many different prime factors are there for 12?

A) 6 B) 4 C) 2 D) All of the above

(9) 10 miles per minute = _____ miles per hour (mph).

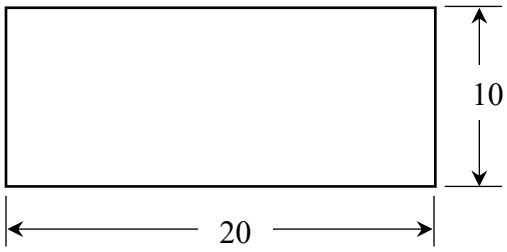
A) 60 mph B) 10 mph C) 600 mph D) None of the above

(10) What is the area of the figure to the right?

A) 30 D) None of the above

B) 60

C) 200



(11) Candies cost 75¢. How many candies can be purchased with $6.50?

A) 7 B) 8 C) 9 D) None of the above

(12) One baby weighs 8 lbs. How many pounds do 5 similar babies weigh together?

A) 20 lbs.
B) 40 lbs.
C) 80 lbs.
D) None of the above

(13) This season, a basketball game ticket cost $30, which is 100% more than last year. How much did last year basketball game ticket cost?

A) $3.00 B) $15.00 C) $300.00 D) None of the above

(14) Caleb has lots of different colored bricks. 6 green bricks, 3 yellow bricks, 7 red bricks and 4 blue bricks. How many different colored bricks does Caleb have in all?

A) 18 B) 20 C) 4 D) None of the above

(15) Given the number pattern 1, 4, 9, 16, 25...what would be the 8th number in the pattern?

A) 64 B) 49 C) 36 D) None of the above

(16) If $12 - a = -3$, what does $\boldsymbol{a}$ equal?

A) 9 B) 15 C) 7 D) None of the above

(17) My book is open. I see two pages. The sum of the pages numbers is 123. What is the next page number?

A) 62 B) 63 C) 124 D) None of the above

(18) Elizabeth picked 15 apples. Her brother ate 2 of the apples, her dad ate 4 of the apples, she used 6 in baking. How many apples does Elizabeth have left?

A) 3 B) 2 C) 1 D) None of the above

(19) A track runner competed in 35 track meets last year. The track runner paid $420 to compete in all the meets. How much did she pay for each meet?

A) $10 B) $12 C) $15 D) None of the above

(20) A class of 15 students were asked what was their favorite color. 6 said they liked red, 5 said they blue, and 4 said they black. How many students in the class like red or black?

A) 11 B) 10 C) 9 D) None of the above

(21) What is the standard form of $3x10^4 + 2x10^3 + 1x10^2 + 4x10^0$

A) 32104 B) 3214 C) 32140 D) None of the above

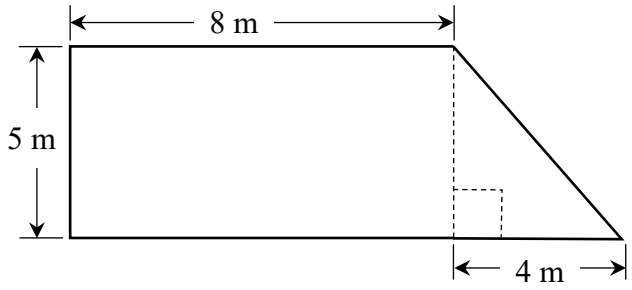
(22) What is the area of the figure to the right?

A) 17 m^2

B) 50 m^2

C) 60 m^2

D) None of the above



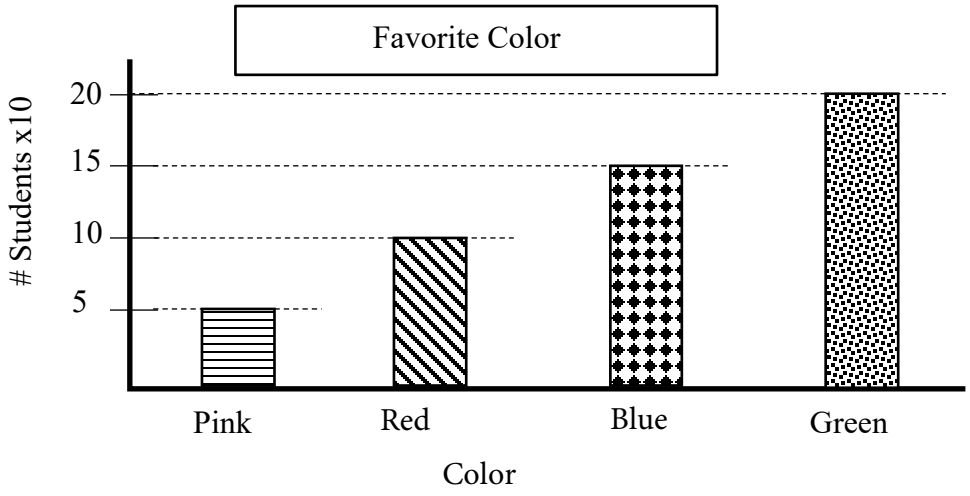
(23) There are 6 seats at each table in the cafeteria. There are 15 tables in the cafeteria. What is the maximum number of students who can sit at the tables in the cafeteria?

A) 6 B) 15 C) 80 D) None of the above

(24) Which comparison is **NOT** true?

A) $38 > 28$ B) $42 < 44$ C) $27 > 15$ D) None of the above

For problems #25 – #28 please use the bar chart graph below.



(25) Students at Houston Elementary School were asked what was their favorite color
According to the survey bar graph, how many total students were surveyed?

A) 20 B) 50 C) 500 D) None of the above

(26) Students at Houston Elementary School were asked what was their favorite color.
According to the survey bar graph, what's the difference between the number of students who prefer Green over Red?

A) 10 B) 5 C) 15 D) None of the above

(27) Students at Houston Elementary School were asked what was their favorite color.
If there are 600 students at the school, how many did not respond?

A) 100 B) 200 C) 550 D) None of the above

(28) Students at Houston Elementary School were asked what was their favorite color.
If you randomly picked one of the students that answered the survey, what is the probability that the student liked Blue the most?

A) $\frac{3}{10}$ B) $\frac{1}{4}$ C) $\frac{1}{5}$ D) None of the above

(29) The average height of four adults is 180 cm. Two of the adults are each 175 cm tall, and the third is 190 cm. How tall, in cm is the fourth adult?

A) 180 B) 190 C) 195 cm D) None of the above

(30) If $x = 6$ and $7 + x - 11 = y$, what is the value of y?

A) 1 B) 2 C) 3 D) None of the above

2/3 Districts 2023 Mathematics Answer Key

1) A
2) C
3) A
4) B
5) C
6) A
7) B
8) C
9) C
10) C
11) B
12) B
13) B
14) C
15) A
16) B
17) B
18) A
19) B
20) B
21) A
22) B
23) D
24) D
25) C
26) D
27) A
28) A
29) A
30) B

INVITATIONAL 2022 - 2023

Mathematics

DO NOT OPEN TEST
UNTIL TOLD TO DO SO

(1) Evaluate: 6 - 2 + 1 =

A) 6 B) 5 C) 3 D) None of the above

(2) The difference of thirty-eight and twelve is equal to what amount?

A) 26 B) 2.6 C) 0.26 D) None of the above

(3) What is the ratio of 10 boys to 15 girls?

A) $\frac{10}{25}$ B) $\frac{3}{2}$ C) $\frac{2}{3}$ D) None of the above

(4) 4 feet = _____ inches

A) 12 B) 4 C) 48 D) None of the above

(5) What is the perimeter of a circle with 4-inches radius?

A) 4π in^2 B) 16π in^2 C) 8π in^2 D) None of the above

(6) How many minutes are in 2.5 hours?

A) 60 minutes B) 150 minutes C) 120 minutes D) None of the above

(7) Jessica has 12 green crayons, 13 yellow crayons, 8 red crayons and 9 blue crayons. How many crayons does Jessica have in all?

A) 42 B) 4 C) 32 D) None of the above

(8) How many factors are there for 9?

A) 3 B) 9 C) 1 D) All of the above

(9) 2 mile per minute= _____ miles per hour (mph).

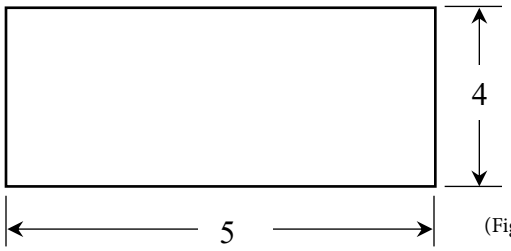
A) 12000 mph B) 2 mph C) 120 mph D) None of the above

(10) What is the perimeter of the figure to right?

A) 20 D) None of the above

B) 18

C) 12



(Figure not drawn to scale)

(11) Postage stamps cost 60¢. How many of these stickers can be purchased with $2.30?

A) 4 B) 5 C) 3 D) None of the above

(12) One bale of hay weighs 50 lbs. How many pounds does 4 bales of hay weigh?

A) 200 lbs.
B) 20 lbs.
C) 2000 lbs.
D) None of the above

(13) This season, a baseball game ticket cost $21, which is $3 less than last year. How much did last year baseball game tickets cost?
A) $13.00 B) $18.00 C) $24.00 D) None of the above

(14) A baker bakes bread for $3 each. The class wants to buy a baker's dozen. How much will it cost the class to purchase a baker's dozen of breads?
A) $30 B) $39 C) $36 D) None of the above

(15) Number pattern 2, 4, 6, 8, 10...Which is the next number in the pattern?
A) 14 B) 21 C) 16 D) None of the above

(16) If $12 - a = 7$, what does $\boldsymbol{a}$ equal?
A) 5 B) 19 C) 3 D) None of the above

(17) If $\frac{3}{4} + \frac{1}{n} = 1$, then $n =$
A) 4 B) 2 C) 5 D) None of the above

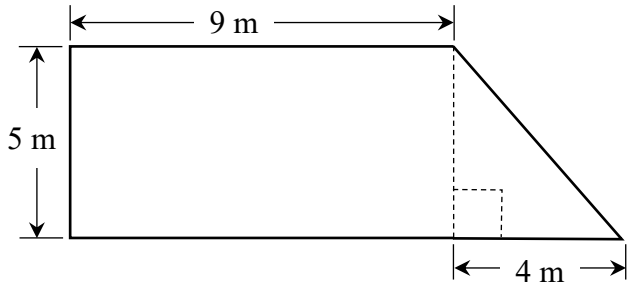
(18) Mark baked 25 brownies. He ate 2, his sister ate 3 of the brownies and his dad ate 4. How many brownies does Mark have left?
A) 16 B) 17 C) 18 D) None of the above

(19) A UIL team competed in 6 competitions last year. Each student paid $15 to compete in each competition. What was the total amount each student paid to compete in all 6 of the competitions?
A) $30 B) $15 C) $90 D) None of the above

(20) In a class of 21 students, 7 said they only liked apple pie, 5 said they only liked chocolate cake, and 9 said they only liked pecan pie. How many students in the class do not like apple pie or chocolate cake?
A) 7 B) 9 C) 5 D) None of the above

(21) What is the standard form of 4000 - 3000 + 90 + 4
A) 7094 B) 4394 C) 1094 D) None of the above

(22) What is the area of the figure to the right?
A) 45 m^2
B) 55 m^2
C) 10 m^2
D) None of the above

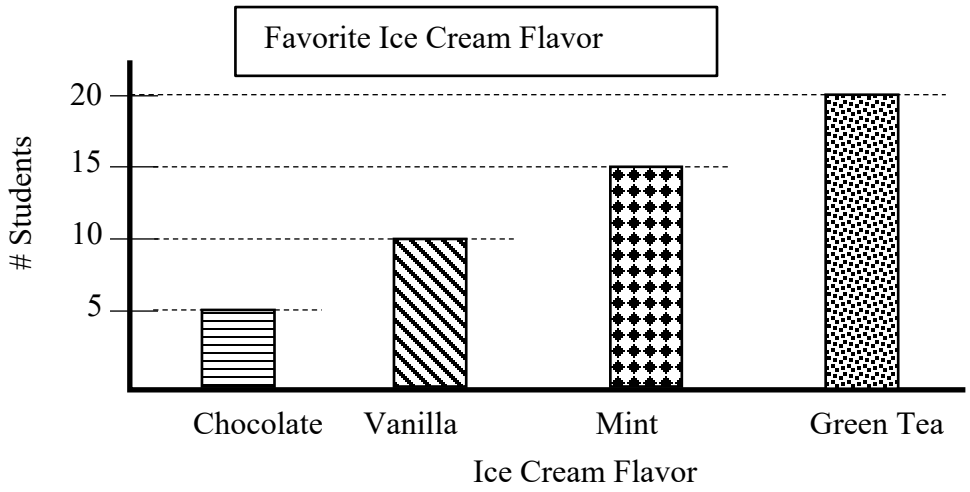


(23) There are 8 plates on each table in the cafeteria. There are 8 tables in the cafeteria. What is the total number of plates on all the tables in the cafeteria?
A) 64 B) 8 C) 46 D) None of the above

–

(24) Which comparison is NOT true?
A) $39 > 29$ B) $48 < 52$ C) $63 > 48$ D) None of the above

For problems #25 – #28 please use the bar chart graph below.



(25) Students at Houston Elementary School were surveyed recently as to their favorite ice cream flavor. According to the survey bar graph, how many total students were surveyed?
A) 100 B) 50 C) 75 D) None of the above

(26) Students at Houston Elementary School were surveyed recently as to their favorite ice cream flavor According to the survey bar graph, what's the difference between students who prefer vanilla ice cream over chocolate ice cream?

A) 30% B) 100% C) 50% D) None of the above

(27) Students at Houston Elementary School were surveyed recently as to their favorite ice cream flavor. If there are a total of 100 students enrolled at the surveyed school, how many students did not answer the survey?
A) 0 B) 100 C) 50 D) None of the above

(28) Students at Houston Elementary School were surveyed recently as to their favorite ice cream flavor If you randomly picked one of the students that answered the survey, what is the probability that the student liked vanilla ice cream the best?
A) $\frac{1}{5}$ B) $\frac{1}{3}$ C) $\frac{2}{5}$ D) None of the above

(29) Steven is going to the store. Halfway to the store, he stops to talk with Mark. He then continues for 5 km and reaches the store. How many kilometers does he travel to the store and back?
A) 20 km B) 5 km C) 10 km D) None of the above

(30) If $x = 13$ and $13 + x + 22 = y$, what is the value of y?
A) 35 B) 9 C) 48 D) None of the above

UIL A+ ACADEMICS 2/3 Grade Invitational A 2022-2023

1. B
2. A
3. C
4. C
5. D
6. B
7. A
8. A
9. C
10. B
11. C
12. A
13. C
14. B
15. D
16. A
17. A
18. A
19. C
20. B
21. C
22. B
23. A
24. D
25. B
26. B
27. C
28. A
29. A
30. C

INVITATIONAL 2021-2022

Mathematics

DO NOT OPEN TEST
UNTIL TOLD TO DO SO

(1) Evaluate: 15 - 4 + 2 =

A) 11 B) 13 C) 9 D) None of the above

(2) The sum of eighteen and fifteen is equal to what amount?

A) 33 B) 3 C) 13 D) None of the above

(3) What is the ratio of 12 boys to 9 girls?

A) $\frac{3}{4}$ B) $\frac{4}{3}$ C) $\frac{3}{2}$ D) None of the above

(4) 6 yards = _____ feet

A) 72 B) 3 C) 18 D) None of the above

(5) What is the perimeter of a circle with a 4-inch radius?

A) 4π in B) 16π in C) 8π in D) None of the above

(6) How many seconds are in 22 minutes?

A) 60 seconds B) 1320 minutes C) 1320 seconds D) None of the above

(7) Michelle has 5 green crayons, 8 yellow crayons, 7 red crayons and 4 blue crayons. How many crayons does Michelle have in all?

A) 5 B) 8 C) 20 D) None of the above

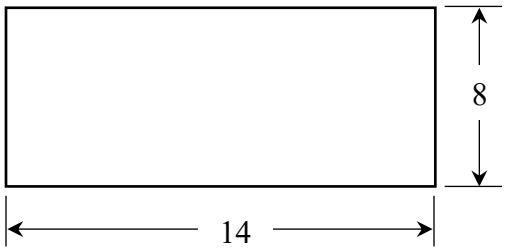
(8) How many factors are there for 10?

A) 6 B) 4 C) 2 D) All of the above

(9) 0.5 miles per minute = _____ miles per hour (mph).

A) 30 mph B) 0.5 mph C) 60 mph D) None of the above

(10) What is the perimeter of the figure to the right?



A) 40 D) None of the above

B) 22

C) 44

(11) Candy cost 30¢. How many candies can be purchased with $3.25?

A) 8 B) 9 C) 11 D) None of the above

(12) One puppy weighs 5 lbs. How many pounds do 3 similar puppies weigh together?

A) 20 lbs.
B) 40 lbs.
C) 15 lbs.
D) None of the above

(13) This season, a basketball game ticket cost $28, which is $7 more than last year. How much did last year basketball game ticket cost?

A) $7.00 B) $21.00 C) $35.00 D) None of the above

(14) A baker bakes a baker's dozen of treats. How many treats did she bake?

A) 12 B) 24 C) 13 D) None of the above

(15) Given the number pattern 2, 4, 6, 8, 10...what would be the 12th number in the pattern?

A) 22 B) 23 C) 24 D) None of the above

(16) If $15 - a = 15$, what does ***a*** equal?

A) 12 B) 13 C) 14 D) None of the above

(17) If $\frac{3}{5} + \frac{2}{n} = 1$, then $n =$

A) 4 B) 3 C) 5 D) None of the above

(18) Mary picked 18 apples. Her sister ate 3 of the apples, her dad ate 4 of the apples, she used 10 in baking. How many apples does Mary have left?

A) 11 B) 17 C) 1 D) None of the above

(19) A volleyball team competed in 5 tournaments last year. A volleyball player paid $420 to compete in all the tournaments. How much did she pay for each tournament?

A) $80 B) $2100 C) $84 D) None of the above

(20) In a class of 19 students, 6 said they only liked apple pie, 5 said they only liked chocolate cake, and 8 said they only liked pecan pie. How many students in the class do not like apple pie or chocolate cake?

A) 8 B) 10 C) 6 D) None of the above

(21) What is the standard form of $5x10^3 + 2x10^2 + 9x10^1 + 4x10^0$

A) 5294 B) 529.4 C) 52940 D) None of the above

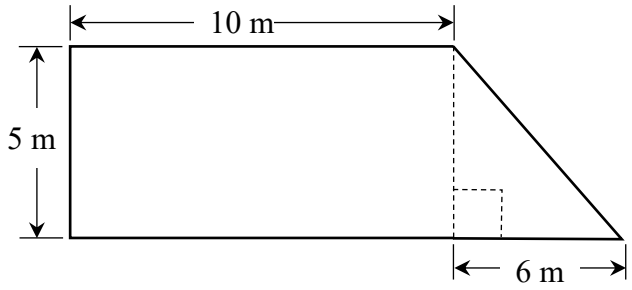
(22) What is the area of the figure to the right?

A) 65 m^2

B) 75 m^2

C) 80m^2

D) None of the above



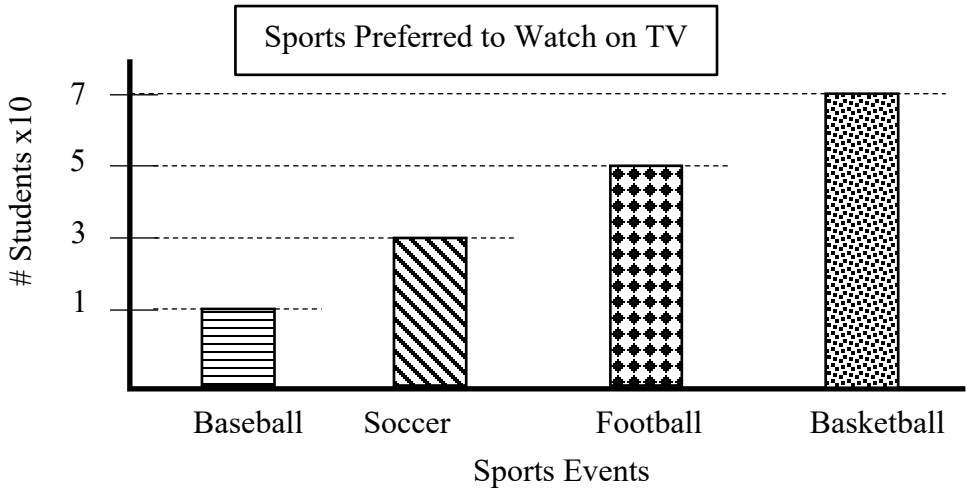
(23) There are 5 seats at each table in the cafeteria. There are 12 tables in the cafeteria. What is the maxim number of students who can sit at the tables in the cafeteria?

A) 30 B) 60 C) 40 D) None of the above

–

(24) Which comparison is NOT true?
A) 38 > 28 B) 88 < 44 C) 69 > 15 D) None of the above

For problems #25 – #28 please use the bar chart graph below.



(25) Students at Houston Elementary School were surveyed recently as to the sporting event they most liked to watch on TV. According to the survey bar graph, how many total students were surveyed?
A) 16 B) 110 C) 11 D) 160

(26) Students at Houston Elementary School were surveyed recently as to the sporting event they most liked to watch on TV. According to the survey bar graph, what's the difference between students who prefer to watch football and students that prefer soccer.

A) 2 B) 10 C) 20 D) None of the above

(27) Students at Houston Elementary School were surveyed recently as to the sporting event they most liked to watch on TV. If there are a total of 200 students enrolled at the surveyed school, how many students did not answer the survey?
A) 184 B) 90 C) 181 D) 40

(28) Students at Houston Elementary School were surveyed recently as to the sporting event they most liked to watch on TV. If you randomly picked one of the students that answered the survey, what is the probability that the student enjoyed watching football on TV?

A) $\frac{5}{16}$ B) $\frac{1}{4}$ C) $\frac{2}{16}$ D) None of the above

(29) Kimberly is going to the store. Halfway to the store, she stops to talk with Jessica. She then continues for 6 km and reaches the store. How many kilometers does she travel to the store and back?
A) 24 km B) 6 km C) 12 km D) None of the above

(30) If $x = 8$ and $13 + x - 11 = y$, what is the value of y?
A) 32 B) 10 C) 15 D) None of the above