## CIE-USA/DFW

## MathComp 2015

## Grade 4

## 40 questions

## Time: One Hour

Note:

- Make sure to write all your answers on the answer sheet. Only the answer sheet will be graded.
- Each question only has one correct answer.
- Print your name clearly and legibly below.

Name $\qquad$

Room $\qquad$

## Mathematics Chart

## LENGTH

1 yard $=3$ feet
1 foot $=12$ inches
CAPACITY AND VOLUME
1 gallon $=4$ quarts
1 gallon $=128$ ounces
TIME
1 day $=24$ hours
1 hour $=60$ minutes
1 minute $=60$ seconds
Perimeter
square $P=4$ s
rectangle $\mathrm{P}=2 \mathrm{l}+2 \mathrm{w}$
Circumference
circle $\quad \mathrm{C}=2 \pi \cdot r$
Area
circle $\quad A=\pi r^{2}$
Pi

$$
\pi=3.14
$$

Celsius to Fahrenheit

$$
\left({ }^{\circ} C \times 9 / 5\right)+32=^{o} F
$$

1. Which picture shows a translation of the figure?
A.

B.

C.

D.

E.

2. Evaluate $5^{0}$
A. 5
B. 0
C. 1
D. 50
E. 0.5
3. One morning, the temperature was $4^{\circ}$ below zero. By noon, the temperature rose $20^{\circ}$

Fahrenheit (F) and then dropped $8^{\circ}$ by evening. What was the evening temperature?
A. $18^{\circ}$ below zero
B. $16^{\circ}$ below zero
C. $12^{\circ}$ above zero
D. $8^{\circ}$ above zero
E. $9^{\circ}$ above zero
4. Simplify $2^{3}$
A. 6
B. 2
C. 3
D. 4
E. 8
5. Find the fourth term in the proportion 2:7=12: x
A. 14
B. 42
C. 24
D. 84
E. 7
6. The pond in my back yard can hold 600 gallons of water. My garden hose gives 8 oz per second. How long will it take to fill the pond?
A. 2 hours 20 minutes
B. 2 hours 40 minutes
C. 3 hours 20 minutes
D. 3 hours 40 minutes
E. 4 hours
7. Which figure below has 10 vertices?


R


U

A. Figure R
B. Figure U
C. Figure V
D. Figure W
E. Figure X
8. In which number sentence does 4 make the equation true?
A. $24-\Delta=6$
B. $24+\Delta=6$
C. $24 \div \Delta=6$
D. $24 \times \Delta=6$
E. None of above
9. Mrs. Smith wanted some stamps. She gave John $\$ 12.90$ to buy stamps. How many 43 cent stamps did John buy?
A. 30
B. 31
C. 32
D. 33
E. 34
10. The sum of the least common multiple and the greatest common factor of $(8,42)$ is
A. 27
B. 86
C. 168
D. 170
E. 338
11. Harry has 11 letters that spell the word EXAMINATION when put together. If he picks 1 letter without looking, what is the probability that it will be "A"?
A. $\frac{1}{11}$
B. $\frac{2}{11}$
C. $\frac{3}{11}$
D. $\frac{1}{9}$
E. $\frac{4}{11}$
12. Which type of angle best describes angle $P$ ?

A. Right
B. Acute
C. Obtuse
D. Trapezoid
E. None of above
13. If it takes one minute to make a cut, how long will it take to cut 32 yards of cloth to 6 equal lengths?
A. 5 minutes
B. 6 minutes
C. 5.5 minutes
D. 7 minutes
E. Can not determine
14. The model is shaded to show which fraction?

A. $\frac{6}{18}$
B. $\frac{7}{18}$
C. $\frac{8}{18}$
D. $\frac{9}{18}$
E. $\frac{10}{18}$
15. Which shaded area below represents a fraction that is less than $\frac{3}{4}$ and greater than $\frac{1}{2}$ ?
a.

b.

c.

d.

e.

A. a
B. b
C. c
D. d
E. e
16. What is the smaller of two consecutive even integers that add up to 70
A. 32
B. 36
C. 34
D. 38
E. 30
17. Round off 456 to the nearest ten
A. 450
B. 400
C. 500
D. 460
E. 456
18. A store had a sale on camping equipment. The sale prices, including tax, are shown in the table below. Peter and his father had $\$ 307$. They bought the cooking gear, a sleeping bag, and a tent. They had enough money left for one more item. What item could they buy?

| Item | Back- <br> Pack | Camp <br> Stove | Cooking <br> gear | Fishing <br> pole | Lamp | Lander | Sleeping <br> bag | Tent |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Price | $\$ 29.95$ | $\$ 65.50$ | $\$ 55.29$ | $\$ 32.29$ | $\$ 48.10$ | $\$ 27.79$ | $\$ 33.79$ | $\$ 189.99$ |

A. Backpack
B. Camp Stove
C. Fishing pole
D. Lamp
E. Lander
19. Mary wants to buy a pair of skates for $\$ 55.50$. She has $\$ 22.50$ saved in the bank. If she saves $\$ 10$ every week, how many weeks will it take Mary to save enough money to buy the skates?
A. 2
B. 3
C. 4
D. 5
E. 1
20. Mark made a pattern by drawing 8 rows of stars. He added more stars to each row, as shown in the table below. How many stars will he draw in Row 8 ?

## Mark's Pattern

| Row | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Number of Stars | 1 | 3 | 6 | 10 | 15 |  |  |  |  |

A. 25
B. 28
C. 30
D. 32
E. 36
21. A school bus picks up 52 students each day. The distance each student lives from school is shown on the graph below. How many students live more than 8 miles (including 8 miles) from school?

A. 23
B. 22
C. 20
D. 18
E. 19
22. Bill began riding horses at 7:35 A.M. He rode for 112 minutes. What time did Bill finish riding horses?
A. 10:21A.M.
B. 9:22A.M.
C. 9:27A.M.
D. 10:22A.M.
E. 9:23A.M.
23. Which of the following numbers is a multiple of 7 ?
A. 56
B. 36
C. 48
D. 90
E. 72
24. What is the sum of 783 rounded off to the nearest hundred and 437 rounded off to the nearest ten?
A. 1240
B. 1140
C. 2350
D. 1400
E. 1200
25. Change $14 \div 7$ to a whole number
A. 4
B. 1
C. 2.5
D. 2
E. 3
26. A school basketball team won 11 of 18 games it played. What fraction of its games did the team win?
A. $\frac{7}{18}$
B. $\frac{11}{18}$
C. $\frac{8}{18}$
D. $\frac{9}{18}$
E. $\frac{10}{18}$
27. What's the perimeter of the irregular shape below?

A. 17
B. 19
C. 18
D. 21
E. 22
28. Several high school bands boarded buses after a marching competition. If there were 19 buses and about 43 band members on each bus, about how many band members were on the buses in all?
A. 800
B. 750
C. 700
D. 650
E. 600
29. Convert this Celsius temperature to Fahrenheit: $51^{\circ} \mathrm{C}=$ ?
A. $11.7^{\circ} F$
B. $117^{\circ} \mathrm{F}$
C. $124^{\circ} F$
D. $126^{\circ} F$
E. $128^{\circ} F$
30. What is the greatest common factor of 48 and 54 ?
A. 5
B. 6
C. 7
D. 8
E. 9
31. How many triangles of any size are in the figure shown?

A. 8
B. 9
C. 10
D. 11
E. 12
32. Brian went to the movies. He bought a movie ticket for $\$ 6.50$, a soda for $\$ 3.00$, and 2 boxes of popcorn. What information is needed to find the total amount Brian spent at the movies?
A. The number of people at the movie
B. The cost of a candy bar
C. The title of the movie
D. The cost of a box of popcorn
E. None of above
33. There were 32 cookies on a platter for 7 children. If each child ate the same number of the whole cookies, how many whole cookies did each child eat?
A. 4
B. 5
C. 6
D. 7
E. 8
34. Two cars are traveling in the same direction: one at $45 \mathrm{miles} / \mathrm{hr}$ and the other at 60 miles $/ \mathrm{hr}$. If the slower car is 30 miles ahead of the faster car, how long does it take the faster car to catch up with the slower car?
A. 60 minutes
B. 100 minutes
C. 120 minutes
D. 150 minutes
E. 30 minutes
35. Fred, Amy, and Tyler all have pets. One of them has 3 pets, one of them has 4 pets, and one of them has 5 pets. Fred doesn't have 3 pets and Amy has more pets than Fred. How many pets do Tyler and Amy have?
A. 6
B. 7
C. 8
D. 10
E. 12
36. Jane alone can do the work in 15 days and John alone can do it in 10 days. How many days are needed if Jane and John work together?
A. 5 days
B. 6 days.
C. 7 days.
D. 8 days
E. 9 days
37. There are 100 students in the school gym. There are 30 fifth-grade students in the gym. What percent of the students in the gym are not fifth-grade students?
A. 70
B. 30
C. 60
D. 20
E. 80
38. What are the prime numbers greater than 7 but less than or equal to 15 ?
A. 9,11
B. $9,11,13$
C. 9,14
D. 11,13
E. $11,13,15$
39. Find the area of the following irregular shape.

A. 17.6
B. 16.6
C. 15.5
D. 14.7
E. 21.2
40. A paper bag holds these wooden beads: 6 blue, 7 red, and 9 yellow. Sue takes one wooden bead from this bag without looking. What is the probability if NOT getting a yellow bead?
A. $\frac{9}{22}$
B. $\frac{7}{22}$
C. $\frac{13}{22}$
D. $\frac{6}{22}$
E. $\frac{16}{22}$

BONUS:
41. Initially it took a machine 16 minutes to fill 300 bottles of soda. After technology improvement, the machine can fill twice as fast as before. How many minutes does it take the machine to fill 750 bottles of soda after the improvement?
A. 16 minutes
B. 20 minutes
C. 32 minutes
D. 40 minutes
E. None of these are the correct answer.

