



DIRECTIONS

Read each of the questions below and then decide on the BEST answer. There are a lot of different kinds of questions, so read each question carefully before marking an answer on your answer sheet.

1

Jane can buy a 6 oz. package of gummy worms for \$0.89. What is the cost per ounce for gummy worms?

- A. \$0.15
- B. \$0.89
- C. \$5.34
- D. \$6.74

2

Which point is a translation of E?



- C. N
- D. L

3

Ms. Gomez bought 4 items at the grocery store. The items ranged in price from \$2 to \$9. What is a reasonable estimate of how much she spent for all the items?

- A. Over \$35
- B. About \$23
- C. Less than \$14
- D. About \$10

4

The following chart shows the price of ski-lift tickets for various numbers of rides.

Number of Rides	Ticket Price
Single Ride	\$4.00
Three Rides	\$10.00
Six Rides	\$16.00

Any unused portions of tickets will be thrown away. If Carla wants to ride the lift 5 times, what should she buy to keep costs at a minimum?

- A. 1 six-ride ticket
- B. 2 single tickets and a three-ride ticket
- C. 2 three-ride tickets
- D. 5 single tickets

5

When 450 people attend the circus, 3 food stands are open. When there are 900 people, 6 stands are open. About how many people are at the circus if 9 food stands are open?

- A. 1,050
- B. 1,200
- C. 1,350 D. 1,500
- D. 1,500

6

What is the greatest common factor of the following numbers?

9 15 18 30

- A. 3
- B. 6 C. 9
- C. 9 D. 15



7

Tanya bought a large bag of groceries full of canned goods. Which of these is the best estimate of how much the bag of groceries weighed?

A. 1 poundC. 15 poundsB. 3 poundsD. 75 pounds

8

What number comes next in the series below?

1	2	5	10	17	26	?
А. В. С. D.	35 37 39 41					

9

Members of a club made the table below to show the total number of cakes remaining at their bake sale between 10:00 a.m. and 2:00 p.m.

	Number of	
Time	Cakes Remaining	
10:00	25	
11:00	20	
12:00	15	
1:00	10	
2:00	5	

The number of cakes sold per hour was

- A. greatest in the morning.
- B. greatest in the middle of the day.
- C. greatest in the afternoon.
- D. steady throughout the day.

10

How many lines of symmetry are there in the following figure?





11

What is the solution to the following expression?

$$10 - (3 - 5)^2 + 16 \div (-4) - 2$$

A. -8 B. -4 C. 0 D. 24

12

A circle has a circumference of 31.40 cm. Find the approximate area.

Α.	5 cm ²
Β.	25 cm ²
C.	78.5 cm ²
	2 2 2 2

D. $3,096 \text{ cm}^2$

13

What is the mode of the data given in this stem and leaf plot?

	0	7789
	1	0122224679
	2	0344579
	3	0
A.	2	B. 7 C. 12

D. 24



14

For the equation y = 6x - 3, what value of y corresponds to x = -4?

- A. 21
- B. –21
- C. 27
- D. –27

15

Which of these is 2-dimensional?

- A. Sphere
- B. Cone
- C. Cylinder
- D. Triangle

16

Assume that the population of a country will double every 20 years until at least the year 2100. If the population in the year 2000 is 10 million, what will the population most likely be in the year 2100?

- A. 50 million
- B. 100 million
- C. 200 million
- D. 320 million

17

This scale is holding 3 apples and nothing else.



How much do the apples weigh?

- A. 25 pounds
- B. 21 pounds
- C. 2 pounds 8 ounces
- D. 2 pounds 4 ounces

18

Joe has taken 5 tests and has an overall average of 79%. His last 3 scores were 72%, 75%, and 84%. His first 2 scores MUST

- A. average 80%
- B. each be above 72%
- C. each be below 84%
- D. average 82%

19

Every day during study hall, Mitchell reads 4 fewer than 4 times as many pages as Alex reads. If Mitchell read 28 pages, how many pages did Alex read?

- A. 6 pages
- B. 7 pages
- C. 8 pages
- D. 24 pages



20

What is the length of the line segment connecting points (2,-6) and (-7,-6)?

- A. 1
- B. -5
- C. 5
- D. 9

21

What are the coordinates of the reflection of (4, -2) about the y-axis?

- A. (4,2)
- B. (4, -2)
- C. (-4, 2) D. (-4, -2)

22

An outside concrete playing area is being added to a school. The contractor dug an area 40 feet long, 40 feet wide, and 6 inches deep. What volume of cement will be needed?

- A. 400 ft³
- B. 800 ft³
- C. 4800 ft³
- D. 9600 ft³

23

The following bar graph displays data regarding the grades earned in Mr. Miller's English class. Which answer best describes the percent of the students receiving A's?



24

Which equation represents the graph?



25 – Non Calculator:

For which equation is n a negative number?

A. $\begin{bmatrix} 8 - (10) = n \\ 8 \bullet \end{bmatrix} = n$ B. $\begin{bmatrix} 8 \bullet \end{bmatrix} = 10 = n$ C. $(8 - 3) \bullet 4 = n$ D. $8 - 3 \bullet 4 = n$

BENCHMARK III (GRADE 8) MATHEMATICS SAMPLE TEST KEY 2001 - 2002

Test Item	Correct Answer	Score Reporting Category
1	A	Measurement
2	D	Geometry
3	В	Calculations and Estimations
4	A	Statistics and Probability
5	С	Algebraic Relationships
6	A	Calculations and Estimations
7	С	Measurement
8	В	Algebraic Relationships
9	D	Statistics and Probability
10	В	Geometry
11	С	Calculations and Estimations
12	С	Measurement
13	С	Statistics and Probability
14	D	Algebraic Relationships
15	D	Geometry
16	D	Calculations and Estimations
17	С	Measurement
18	D	Statistics and Probability
19	С	Algebraic Relationships
20	D	Geometry
21	D	Geometry
22	В	Measurement
23	С	Statistics and Probability
24	А	Algebraic Relationships
25	D	Non-Calculator

CONVERTING TO A RIT SCORE			
Number Correct	RIT score	Number Correct	RIT score
1	186.1	14	233.6 •
2	195.8	15	235.7
3	201.7	16	237.9
4	206.2	17	240.1 ••
5	209.9	18	242.5
6	213.0	19	245.0
7	215.8	20	247.8
8	218.4	21	250.9
9	220.8	22	254.5
10	223.0	23	259.0
11	225.2	24	264.9
12	227.3	25	274.6
13	229.4		

Recommendations for Level Test Placement:

• Likely to meet Benchmark III Standards

•• Likely to exceed Benchmark III Standards

Students with 8 or fewer correct answers are likely to take Form A Students with 20 or more correct answers are likely to take Form C

Note: The sample test is for practice only; scores may not be substituted for the Oregon Statewide Assessment.