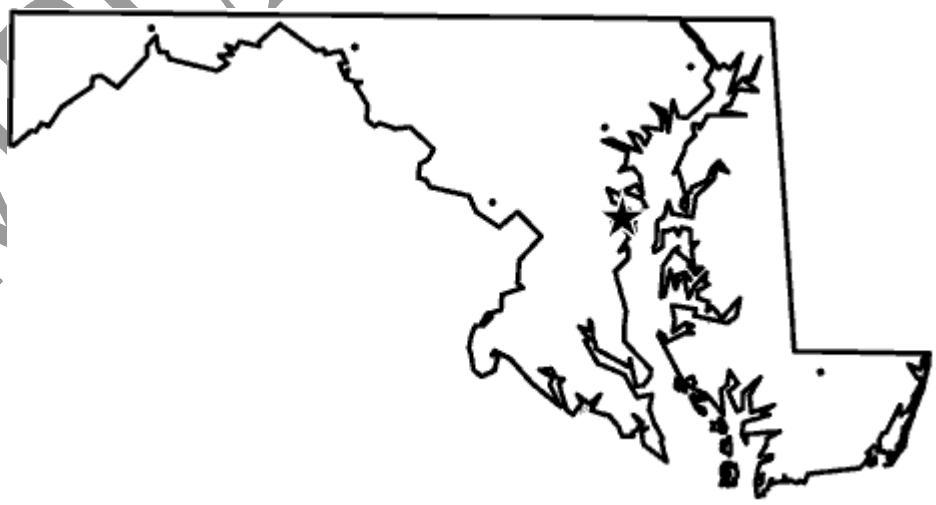
Tests for Higher Standards

MATHEMATICS



GRADE LEVEL TEST
FOR THE MARYLAND SCHOOL ASSESSMENT

Grade 5
Part I

5-1.A.1.a

1. Look at this function table.

x	y
36	9
32	8
28	7
24	6
20	5
16	4

What is the rule for this function table?

A y = x/4
B y = x x 4
C x = y + 21
D x = y/4

5-1.A.1.a

2. Look at this function table.

x	y
972	81
960	80
948	79
936	78
924	77
912	76

What is the rule for this function table?

A y = x - 836
B y = x - 891
C x = y x 12
D x = y/12

5-1.A.1.a

3. Look at this function table.

x	63	72	81	90	99
y	567	648	729	810	891

What is the rule for this function table?

A **y = x + 504**
B **y = x x 9**
C **x = y - 792**
D **x = y/8**

5-1.A.1.c

4. Look at this function table.

Rule: y = x x 6

x	29	30	31	32	33
y	174	180	?	?	?

What are the last three values of y?

A 184, 190, 194
B 186, 192, 198
C 174, 180, 174
D 196, 202, 208

5-1.A.1.c

5. Look at this function table.

Rule: y = x/13

x	26	?	?	?	195
y	2	6	8	13	15

What are the missing values of x?

A 78, 104, 169
B 68, 84, 169
C 78, 84, 139
D 68, 104, 139

5-1.A.1.c

6. Look at this function table.

Rule: y = x + 46.37

x	y
16.22	62.59
?	73.90
?	79.13
?	95.53
56.18	102.55
60.01	106.38

What are the missing values of x?

A 27.53, 32.76, 49.16
B 37.63, 33.76, 59.26
C 30.23, 35.46, 51.86
D 27.17, 32.40, 48.80

5-1.B.1.a

7. How many terms make up this expression?

$4x + 3xy - 2y$

A 0
B 1
C 2
D 3

5-1.B.1.a

8. Which mathematical expression represents the following verbal expression?

ten minus a number

A $10 - b$
B $b + 10$
C 10
D $b - 10$

5-1.B.1.a

9. Find the value of the following expression, when a=68 and b=4?

a/b

A 17
B 272
C 72
D 64

5-1.B.1.b

10. Read this expression.

5 (x – 4)

Which expression below is an equivalent expression?

A 5x -20
B x - 9
C x - 1
D x - 20

5-1.B.1.b

11. Read this expression.

(x – 17) + y

Which expression below is an equivalent expression?

A y + (x – 17)
B (y + x) - 17
C (y – 17) – x
D y – (17 – x)

5-1.B.1.b

12. Read this expression.

$$\frac{(12 + y)}{47}$$

Which expression below is an equivalent expression?

A (12 + y)47

B $\frac{12}{47} + \frac{y}{47}$

C $\frac{12 + y}{47}$

D $12 + \frac{y}{47}$

5-1.B.2.b

13. What is the value of *c*?

$$\frac{c}{4} = 484$$

A 121
B 480
C 1926
D 1936

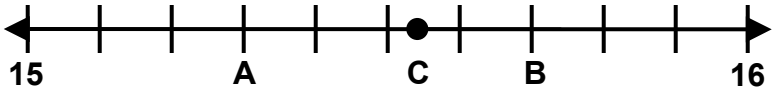
5-1.B.2.b

14. What is the value of *a*?

$$3a = 1740$$

A 580
B 1737
C 1743
D 5220

Use the number line below to answer the next three questions.



5-1.C.1.a

15. What is the value of A?

A 18
B 15.2
C 15.3
D 15.4

5-1.C.1.a

16. What is the value of B?

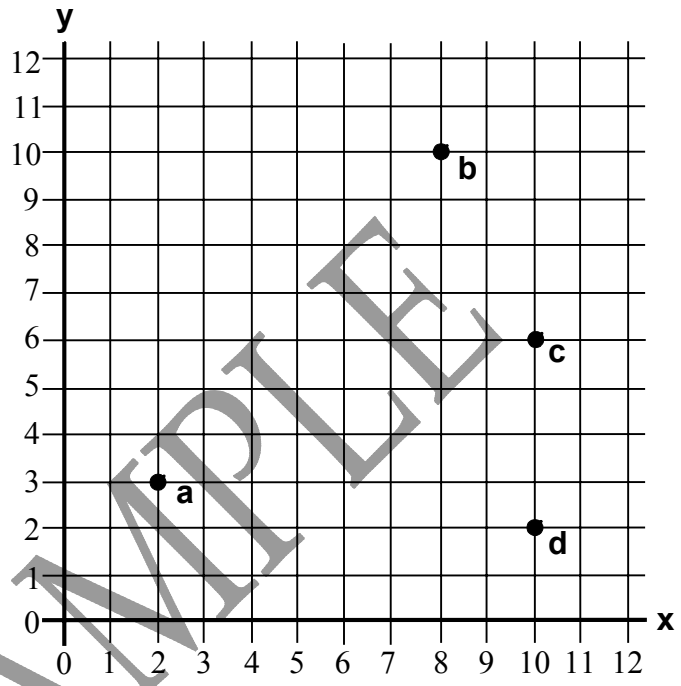
A 22
B 15.6
C 15.7
D 15.8

5-1.C.1.a

17. What is most likely the value of C?

A 15.54
B 15.56
C 15.60
D 15.65

Use the following graph to answer the next four questions.



5-1.C.1.b

18. Which ordered pair locates point *a*?

A (2, 3)
B (3, 2)
C (2, 4)
D (3, 4)

5-1.C.1.b

19. Which ordered pair locates point *b?*

A (9, 10)
B (10, 8)
C (10, 9)
D (8, 10)

5-1.C.1.b

20. The point (10, 6) locates which letter?

A a
B b
C c
D d

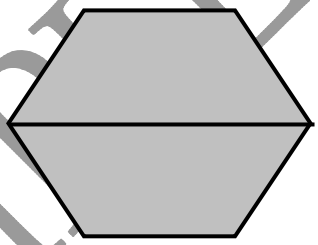
5-1.C.1.b

21. Which ordered pair locates point *d*?

A (2, 10)
B (10, 2)
C (3, 11)
D (10, 3)

5-2.A.1.b

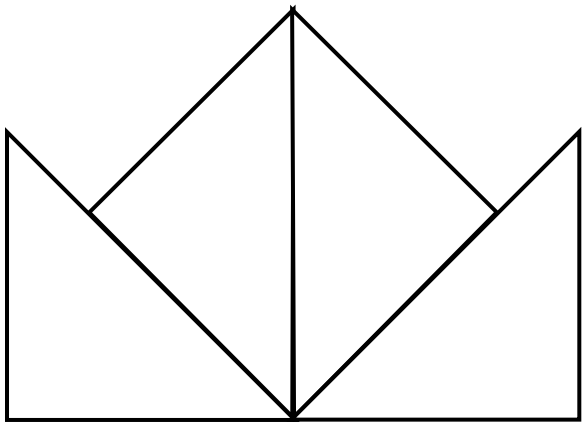
22. The hexagon below is divided into two:



A rectangles
B squares
C parallelograms
D trapezoids

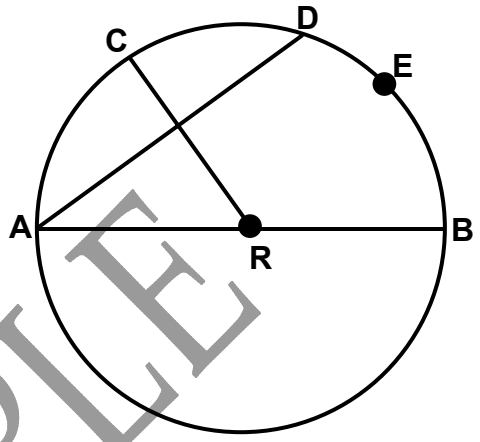
5-2.A.1.b

23. The figure below is divided into 4:



A right triangles
B squares
C parallelograms
D isosceles triangles

Use the following circle to answer the next three questions.



5-2.A.1.c

24. Which of the following segments is a radius?

A $\overline{RA}$

B $\overline{AC}$

C $\overline{AB}$

D $\overline{DA}$

5-2.A.1.c

25. Identify a diameter of the circle.

A $\overline{RA}$

B $\overline{RB}$

C $\overline{RC}$

D $\overline{AB}$

5-2.A.1.c

26. If there were a line connecting point R to point E, what would it be called?

A radius
B diameter
C circumference
D ray

5-2.A.2.a

27. What two-dimensional shape has 4 sides of equal length and 4 right angles?

A triangle
B square
C pentagon
D octagon

5-2.A.2.a

28. Which of the following statements about *quadrilaterals* is false?

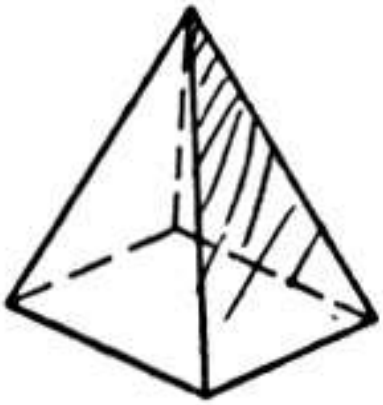
A all the sides of a rhombus are equal in length
B a trapezoid is a special kind of rhombus
C opposite sides of a rhombus are parallel
D a trapezoid has exactly one pair of parallel sides

5-2.A.2.a

29. What two-dimensional shape has 2 pairs of parallel sides, but not all of the sides are of equal length?

A rhombus
B square
C rectangle
D trapezoid

Use this pyramid to answer the next three items.



5-2.B.1.a

30. How many *edges* does a pyramid have?

A 3
B 5
C 6
D 8

5-2.B.1.a

31. How many *faces* does a pyramid have?

A 3
B 5
C 6
D 8

5-2.B.1.a

32. How many *vertices* does a pyramid have?

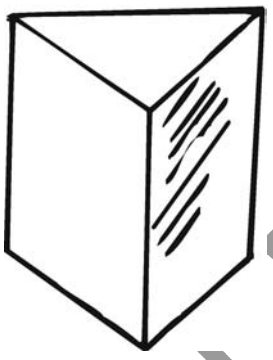
A 3
B 5
C 6
D 8

5-2.B.1.b

33. What type of *base* does this pyramid have?

A square
B circular
C triangular
D hexagonal

Use this prism to answer the next three items.



5-2.B.1.b

34. What word best describes the *base* of this prism?

A square
B rectangular
C triangular
D pyramid

5-2.B.1.a

35. How many *faces* does the prism have?

A 3
B 4
C 5
D 6

5-2.B.1.a

36. How many *edges* does the prism have?

A 3
B 5
C 7
D 9

5-2.B.2.a

37. Which shape has one *vertex* and a *curved face*?

A cone
B cube
C pyramid
D rectangular prism