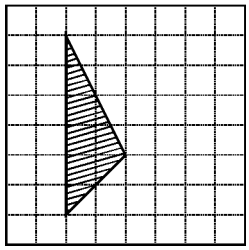
Math A

Name _____

Measurement Unit Review

ID # _____ Date _____

1. What is the area of the triangle?



A. 2

B. 4

C. 6

D. 8

E. 12

2. If the legs of a right triangle have measures of 9 and 12, what is the length of the hypotenuse?

3. Seven grams is equivalent to how many milligrams?

F. 70

G. 700

H. 7000

J. 14,000

K. 70,000

4. If it takes one person 48 hours to complete a job, how many work days do you expect 6 people would need to complete the job (a work day consists of 8 hours)?

A. 1

B. 4

C. 6

D. 8

5. Linda can run a mile in 10 minutes. How many feet can she run in 3 minutes?

F. 5,280

G. 1,584

H. 2,540

J. 1,000

6. The high temperature for 21 consecutive days was recorded as follows:

43, 48, 38, 39, 44, 52, 56, 55, 54, 43, 41, 45, 48, 52, 53, 56, 57, 49, 42, 44, 48

Construct a statistical graph, such as a histogram or a stem-and-leaf plot, to display this data. [Be sure to title the graph and label all axes.]

7. The length, in inches, of models of Corvettes at a local hobby store are listed below.

12, 18, 20, 16, 18, 16, 20, 24

What is the median of the lengths?

A. 12

B. 16

C. 18

D. 20

E. 24

8. A 50 meter tall building makes a shadow that is 35 meters long. Find the angle the sun makes with the building (from vertical) to the nearest degree.

9. Reference the table below that lists the number of left handed and right handed pitchers on each of several high school baseball teams.

Team	Left	Right
Beavers	6	5
Rabbits	6	3
Bears	4	5
Tigers	4	6
Lions	4	?

How many right handed pitchers do the Lions need in order to have the same ratio of left handers to right handers that the Rabbits have?

F. 5

G. 4

H. 3

J. 2

10. If a varies directly as b and $a = 27$ when $b = 9$, find the value of a when $b = 7$.

11. Evaluate $-|-ab|$ if $a < 0$ and $b > 0$

A. ab

B. $-ab$

C. 0

D. $a - b$

12. A rectangle is a quadrilateral with four right angles. Show that $WXYZ$ is a rectangle if the coordinates of the vertices are $W(-5, -4)$, $X(1, 0)$, $Y(-1, 3)$, and $Z(-7, -1)$.

13. The local television station has a tower that is 120 feet high, measured to the nearest 10 feet. Which of the following cannot be the actual height of the tower?

F. 124 feet

G. 120.4 feet

H. 115.6 feet

J. 114.9 feet

14. A scale model of the space shuttle is 24 inches in length and 9 inches in height. If the real space shuttle is 54 feet in height, what is its length?

15. Which of the following statements *must* be true?

I. If two figures are congruent they are similar.

II. If two figures are similar they are congruent.

III. All circles are similar.

IV. All triangles are similar.

A. I only

B. II and IVonly

C. I and III only

D. III only

E. I and II only

Math A Measurement Unit Review Mrs. Corrigan 11/15/03

Answer List

1. C	2.	3. H
4. A	5. G	6.
7. C	8.	9. J
10.	11. B	12.
13. J	14.	15. C

Catalog List

1. NYM LA 17	2. NYM LA 43	3. NYM LB 11
4. NYM LC 3	5. NYM LC 7	6. NYM LD 12
7. NYM LD 20	8. NYM LE 10	9. NYM LF 10
10. NYM LF 76	11. NYM LG 5	12. NYM LG 53
13. NYM LH 2	14. NYM LI 18	15. NYM LI 20

TEAMWORK: You and your team will have 10 minutes to agree upon the best solution to this problem. Assign one person to record your answer on a sheet of paper. Assign another to present your findings to the class.

A local fast food restaurant has a 79 cent menu that features 6 entrees, 4 drinks, and 3 desserts. How many different meals can be made that consist of 1 entree, 1 drink, and 1 dessert?

TEAMWORK: You and your team will have 10 minutes to agree upon the best solution to this problem. Assign one person to record your answer on a sheet of paper. Assign another to present your findings to the class.

A number between 1 and 5, inclusive, is picked randomly. A number between 6 and 10, inclusive, is picked randomly. Find each probability.

a) P(sum of the numbers is less than 7)

b) P(sum of the numbers is exactly 8 or 9)

TEAMWORK: You and your team will have 10 minutes to agree upon the best solution to this problem. Assign one person to record your answer on a sheet of paper. Assign another to present your findings to the class.

The Midtown Swim Club is traveling home from a weekend meet on two different buses. Bus A is traveling at an average of 60 mph. The driver of bus B is able to keep a steady pace of 63 mph but unfortunately has to make a 5 minute stop for fuel. If the trip is 195 miles, which bus arrives back at the school first (and by how many minutes)?

TEAMWORK: You and your team will have 10 minutes to agree upon the best solution to this problem. Assign one person to record your answer on a sheet of paper. Assign another to present your findings to the class.

Jose and Maria went shopping for school items. Maria first paid Jose the $10.00 that she owed him and then spent $6.00 more on lunch. She spent 25% of her remaining money on a pair of jeans. Next, she purchased a back-pack for $15.00, and then spent $\frac{1}{3}$ of her remaining money on sneakers. Help Jose figure out how much Maria started with if she went home at the end of the day with $32.00.

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Write the letter of the correct answer on the line to the left of the problem. When you have finfished, place your paper in the box for your class.

_____ 1. Which of the following describes the terms in this sequence?

54, 49, 44, 39, ...

a) $2n + 1$ b) $n + 5$ c) $3n - 3$ d) $n - 5$

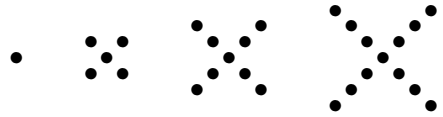
_____ 2. What number should come next in this sequence?

2, 5, 9, 14, 20, ...

a) 21 b) 24 c) 26 d) 27 e) 30

_____ 3. How many dots will be in the next figure in this sequence?

a) 9 b) 12 c) 15 d) 17 e) 20



_____ 4. What fraction comes next in the sequence?

$\frac{1}{3}, \frac{1}{9}, \frac{1}{27}, \frac{1}{81}, \ldots$

a) $\frac{1}{103}$ b) $\frac{1}{729}$ c) $\frac{1}{210}$ d) $\frac{1}{243}$ e) $\frac{1}{108}$

_____ 5. Consider the table of values shown. The relationship of x to y is represented by which equation?

x	0	1	2	3	4
y	2	5	8	11	14

a) $y = 4x$ b) $y = x + 2$

c) $y = 3x + 2$ d) $y = 4x - 1$

_____ 6. What are the missing numbers in this pattern?

2
2 2
2 4 2
2 6 6 2
2 8 12 8 2
2 ◯ ◯ ◯ ◯ 2
2 12 30 40 30 12 2

a) 2, 6, 6, 2 b) 4, 12, 12, 4 c) 10, 20, 20, 10 d) 15, 30, 30, 15

_____ 7. Which of the following relations is a function?

a) $\{(5,2),\ (3,7),\ (-2,4),\ (5,-3)\}$ b) $\{(-4,3),\ (-2,1),\ (-2,7),\ (5,-6)\}$

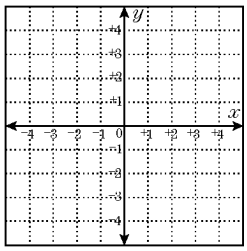
c) $\{(1,3),\ (2,4),\ (3,5),\ (2,6)\}$ d) $\{(9,8),\ (9,7),\ (9,3),\ (9,4)\}$

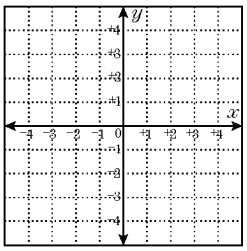
e) $\{(6,3),\ (4,7),\ (-6,3),\ (-4,-1)\}$

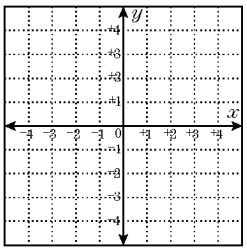
_____ 8. Which of the following equations does *not* represent a function?

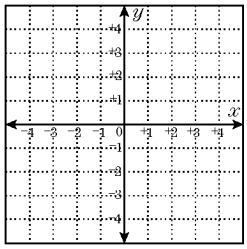
a) $y = 3$ b) $2x + 3y = 9$ c) $\frac{2}{3}y = x$ d) $x = -1$ e) $y = x^2$

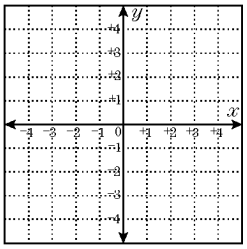
_____ 9. Which of the following is *not* a function?

a) 

b) 

c) 

d) 

e) 

_____ 10. The vertical line test is a quick way to check if a graph is a function. If a vertical line can be drawn which touches the graph at more than one point, then the graph is *not* a function. Use the vertical line test to determine which of the following graphs represents a function.

I. NYM-126.PCX missing!

II. NYM-127.PCX missing!

III. NYM-128.PCX missing!

IV. NYM-129.PCX missing!

a) I and II b) II and III c) II and IV d) IV only

Math 8 Patterns and Functions Review Mr. Ojani 6/10/02

Answer List

1. d
2. d
3. d
4. d
5. c
6. c
7. e
8. d
9. a
10. b

Catalog List

1. NYM GA 2
2. NYM GA 4
3. NYM GA 7
4. NYM GA 6
5. NYM GB 5
6. NYM GA 13
7. NYM GA 16
8. NYM GA 17
9. NYM GA 23
10. NYM GA 21