BROWARD COUNTY COUNCIL OF TEACHERS OF MATHEMATICS

(BCCTM)

Annual Contest 2007

Grade 4

BCCTM—GRADE 4

2007 INDIVIDUAL COMPETITION

1. Leah earned $25 babysitting on Friday. On Saturday, she babysat for 4 hours at a rate of $5 per hour. On Sunday, she went to the store and spent $18 on a CD. How much money did Leah have left after buying the CD?

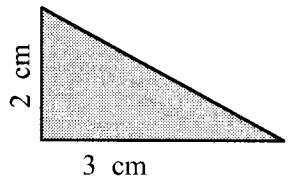
   A. $7

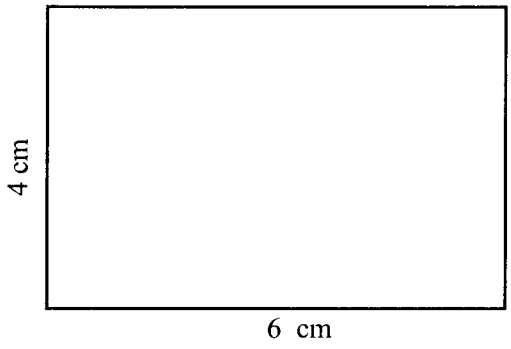
   B. $12

   C. $23

   D. $27

2. How many of the shaded right triangles shown below are needed to exactly cover the area of the rectangle?





   A. Four

   B. Six

   C. Eight

   D. Ten

3. Sherise learned to ride a unicycle. She practiced riding the unicycle for 25 minutes on Monday, 10 minutes on Tuesday, 22 minutes on Wednesday, 31 minutes on Thursday, and 13 minutes on Friday. What is the **range** for the data?

   A. 5 minutes

   B. 12 minutes

   C. 21 minutes

   D. 31 minutes

4. Abraham fills his fish tank with water. The tank holds 250 liters of water. How many milliliters does the tank hold?

   A. 25

   B. 2,500

   C. 25,000

   D. 250,000

5. Olivia has four more than five times as many cousins as Karen. If k represents Karen, which expression represents how many cousins Olivia has?

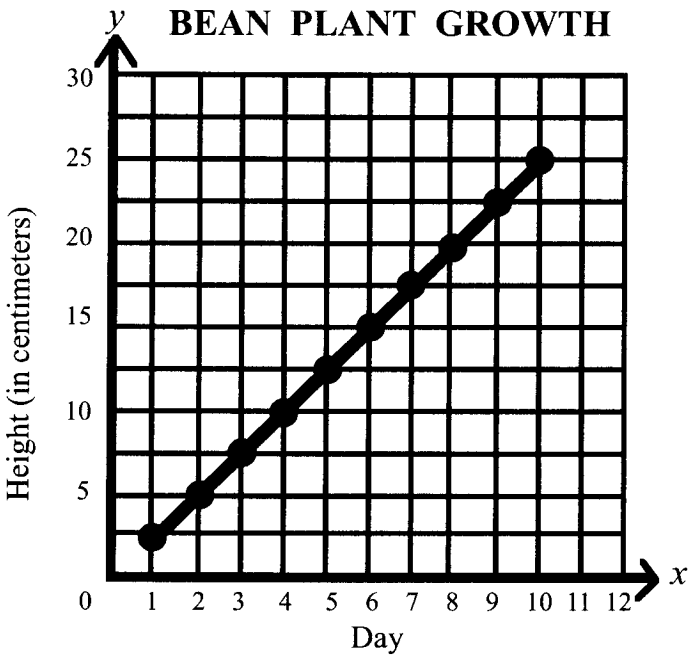
   A. $4k + 5$

   B. $5k - 4$

   C. $5k + 4$

   D. $5k(k + 4)$

6. The line graph below shows the growth of Jonathan's bean plant for 10 days.



How many centimeters did the plant grow from Day 4 to Day 7?

A. 3 centimeters

B. 7.5 centimeters

C. 17.5 centimeters

D. 20 centimeters

7. The Disney Shuttle Bus traveled 34 times on Friday. It traveled the same number of times on Saturday as it did on Sunday. The total number of times it traveled for the three days was 118. How many times did the Disney Shuttle Bus travel on Saturday?

A. 34

B. 42

C. 59

D. 84

8. Rachel makes fruit punch for her family. She prepares a total of two gallons of fruit punch. How many cups of fruit punch does she make?

A. 8

B. 12

C. 16

D. 32

9. Erin buys 24 ounces of turkey at the grocery store. The turkey cost $1.90 per pound. How much does she pay for the turkey, before tax?

A. $1.90

B. $2.53

C. $2.85

D. $3.80

10. Kiana has one penny, one nickel, and one dime in her pocket. She randomly takes one coin out of her pocket. Without putting it back, she randomly takes out another coin. If Kiana lists all the possible outcomes of picking the two coins one at a time, how many outcomes are there?

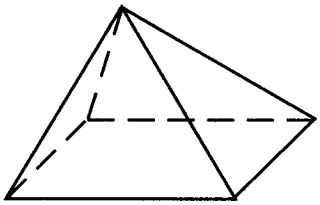
A. 2

B. 3

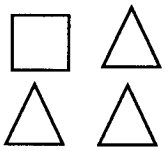
C. 4

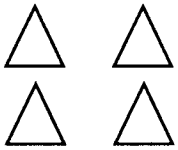
D. 6

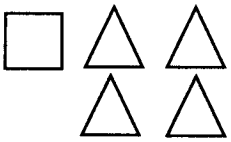
11. A rectangular pyramid is shown below.

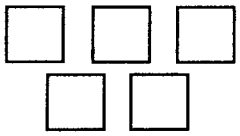


Which combination of shapes makes up the bases and faces of the rectangular pyramid?

A. 

C. 

B. 

D. 

12. The population of Los Angeles, California, throughout the 20th century is shown in the table below.

POPULATION OF LOS ANGELES

YEAR	Population (in millions)
1900	0.1
1920	0.6
1940	1.1
1960	1.8
1980	2.3
2000	2.8

Between which 2 years did the population increase the most?

A. between 1920 and 1940

B. between 1940 and 1960

C. between 1960 and 1980

D. between 1980 and 2000

13. Elyssa picked 160 mangos off her mango tree. $\frac{1}{8}$ of them were spoiled and were discarded. She gave the same number of the remaining mangos to 5 friends. How many mangos did each friend receive?

A. 28

B. 32

C. 140

D. 155

14. Cara had 2 liters of water. She drank 750 milliliters. How many milliliters of water does Cara have left?

A. 250

B. 1,000

C. 1,250

D. 1,750

15. Sandy wants to plant $2\frac{1}{2}$ rows of corn in her garden. She needs $3\frac{1}{4}$ ounces of seed for each row. How many total ounces of seed should Sandy buy?

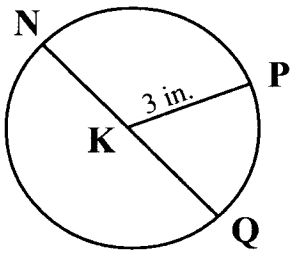
A. $8\frac{1}{8}$

B. $6\frac{1}{8}$

C. $5\frac{3}{4}$

D. $5\frac{2}{6}$

16. A circle has a diameter, $\overline{NQ}$, as shown below.



(not drawn to scale)

The radius $\overline{KP}$ is 3 inches. What is the length of $\overline{NQ}$?

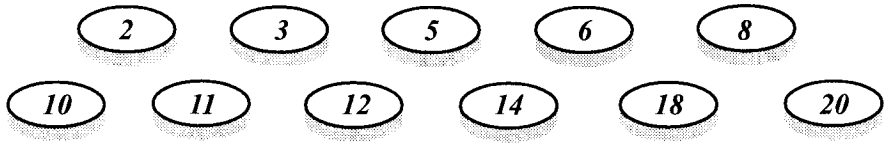
A. 3 inches

B. 4 inches

C. 6 inches

D. 9 inches

17. The eleven chips shown below are placed in a bag and mixed.



Celeste draws one chip from the bag without looking. What is the probability that Celeste draws a chip with a number that is a multiple of three?

A. $\frac{1}{11}$

B. $\frac{1}{3}$

C. $\frac{4}{11}$

D. $\frac{4}{7}$

18. Tameka wrote the expression below.

$$\frac{4n \times 2}{n}$$

If n equals 6, what is the value of the expression?

A. 8

B. 12

C. 20

D. 48

19. Mr. Clayton recorded the number of customers who shopped at his supermarket every day for one week. The results are show below.

42, 35, 56, 29, 42, 39, 23

What is the mean number of customers who shopped at the supermarket?

A. 33

B. 38

C. 39

D. 42

20. Mrs. Reilly wants to distribute 40 fliers. She has distributed 30 fliers so far. What percent of the total number of fliers has Mrs. Reilly distributed?

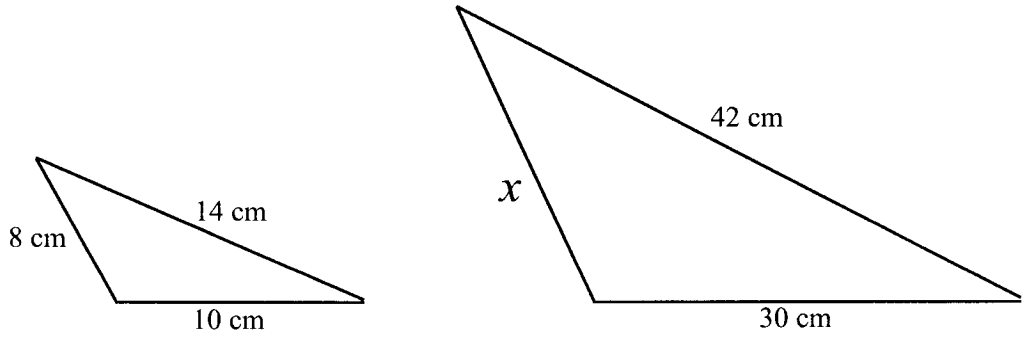
A. 60%

B. 70%

C. 75%

D. 80%

21. Two similar triangles are show below.



Triangle A Triangle B

(not drawn to scale)

What is the length of side x in Triangle B?

A. 16 cm

B. 20 cm

C. 24 cm

D. 28 cm

22. The largest pizza for sale at Vinny's Pizza Restaurant has a radius of 12 inches. What is the diameter of this pizza?

A. 6 inches

B. 24 inches

C. 36 inches

D. 48 inches

23. Which equation is true when $x = 0$?

A. $6 - x + 2 = 4$

B. $2 + 6 - x = 4$

C. $x - 6 + 2 = 4$

D. $6 + x - 2 = 4$

24. In Ms. Gilligan's class, 7 of the 20 students attend an after school music program. What percent of the students did not attend the after school music program?

A. 7%

B. 20%

C. 35%

D. 65%

25. Solve the equation below for r.

$r - 9 \times 3 = 16$

A. 7

B. 24

C. 43

D. 144

26. At Juan's school, 25% of the 72 sixth-grade students wear either glasses or contact lenses. How many sixth-grade students wear either glasses or contact lenses?

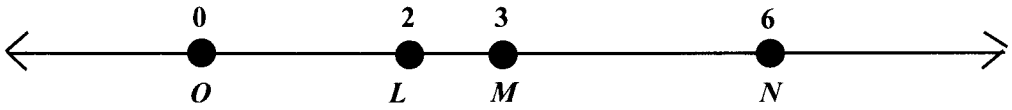
A. 18

B. 36

C. 97

D. 288

27. Point P (not shown) on the number line is 5 units from point N and 2 units from point M.



Where is point P located?.

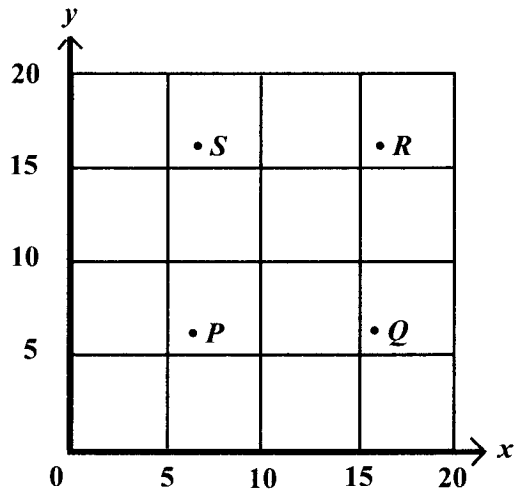
A. Between ***O*** and ***L***

B. Between ***L*** and ***M***

C. Between ***M*** and ***N***

D. To the right of ***N***

28. Which point on the graph could have coordinates (7,16)?



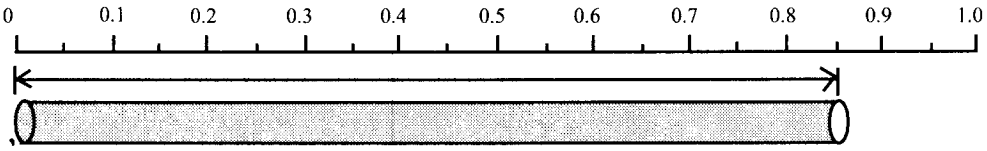
A. Point P

B. Point Q

C. Point R

D. Point S

29. What is the length of the pipe being measured?



A. 0.085 m

B. 0.805 m

C. 0.85 m

D. 8.5 m

30. A straight line passes through the points (2,3) and (4,7). Which of these points is also on the line?

A. (1,2)

B. (2,4)

C. (3,5)

D. (4,5)