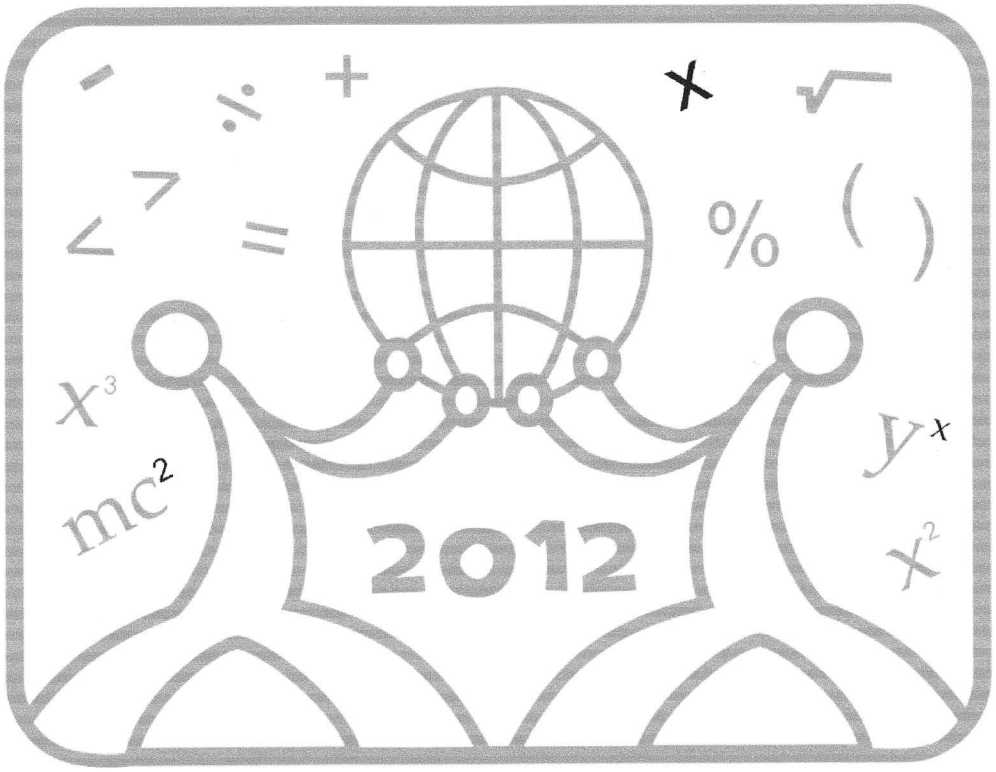
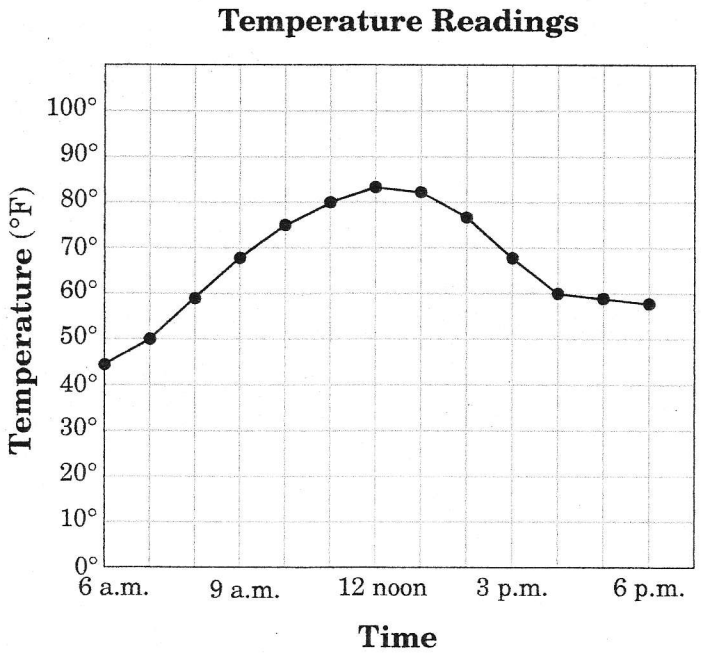
School Name_____

MATHLETES CHALLENGE



Championship (1st Half)

1. The science class did an experiment. A jar containing water and a thermometer was placed outside for twelve hours. Every hour the temperature was recorded.



About how many degrees did the temperature increase from 7 a.m. to 12 noon?

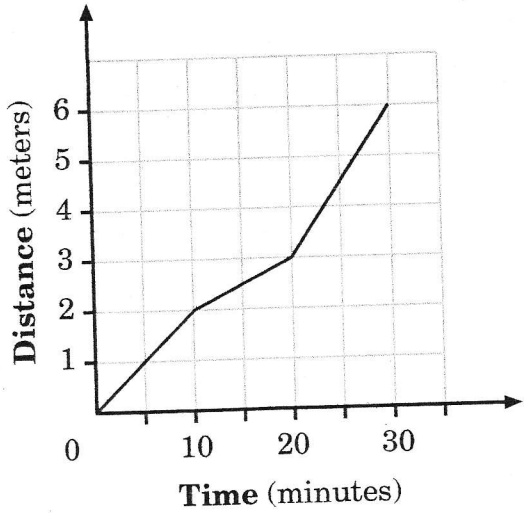
A 83°

B 45°

C 38°

D 33°

2. Which situation could ***best*** describe the graph?



A Jamie walked for 10 minutes, rested for 10 minutes, then ran for 10 minutes.

B Jamie ran for 10 minutes, rested for 10 minutes, then walked for 10 minutes.

C Jamie walked for 10 minutes, ran for 10 minutes, then walked for 10 minutes.

D Jamie ran for 10 minutes, then walked for 10 minutes, then ran for 10 minutes.

3. If these decimal numbers are changed to reduced fractional form, in which sequence does the denominator always increase?

A 2, 0.2, 0.02, 0.002

B 0.02, 0.03, 0.04, 0.05

C 0.005, 0.05, 0.5, 5

D 0.25, 0.025, 0.26, 0.026

4. Mr. Hammond asked his class, "Does 2 divide into 435 evenly?" Who answered correctly?

A Mia answered, "Yes, because the first digit is even, so it divides evenly."

B Payton answered, "Yes, because if you add up all the digits in 435, the sum is even, so it divides evenly."

C Julie answered, "No, because the last digit in 435 is odd, so it will not divide evenly."

D Max answered, "No, because 435 is not a factor of 2."

5. Kyra needs to select from the list all numbers divisible by 6.

54, 62, 66, 72, 77, 84, 93

Which numbers should Kyra choose?

A 54, 62, 72, 77, and 84

B 54, 72, 84, and 93

C 54, 66, 72, and 84

D 54, 66, 72, 84, and 93

6. Which of these numbers is divisible by 3?

A 61,234

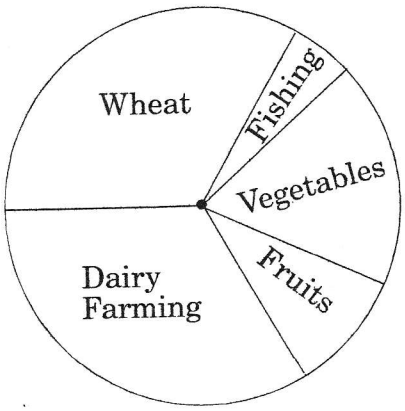
B 63,344

C 66,471

D 67,214

7. According to this graph, which of the following is true about the early pioneers' food resources?

Food Resources
For The Early Pioneers



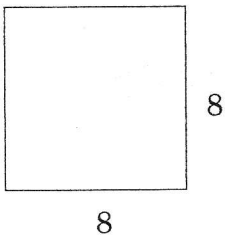
A Fishing and fruits combined would be the largest food resources.

B Wheat and dairy farming make up about the same amount of the food resources.

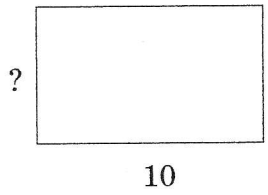
C Fruits provide the least amount of food resources.

D Vegetables and dairy farming make up the same amount of the food resources.

8. Each side of a square is 8 cm.



A rectangle has the same perimeter, but its length is 10 cm.



What is its width?

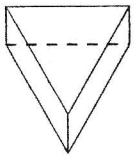
A 6 cm

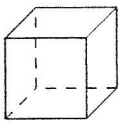
B 11 cm

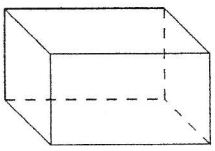
C 12 cm

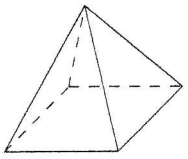
D 22 cm

9. Which of the following figures has the ***least*** number of edges?

A 

B 

C 

D 

10. Kevin drew a diagonal inside a quadrilateral and made 2 equilateral triangles. What kind of quadrilateral did Kevin use to draw the triangles?

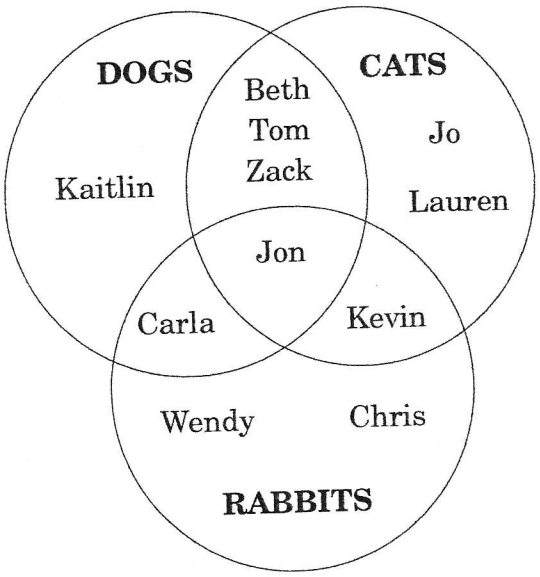
A rhombus

B pentagon

C rectangle

D trapezoid

11. Using the following Venn diagram, how many people have both dogs and cats but no rabbits?



A 1 person

B 3 people

C 4 people

D 9 people

12. What is the ***approximate*** mean of the temperatures recorded during the week of July 6?

92°F, 89°F, 90°F, 78°F, 83°F, 90°F, 88°F

A 86.7°F

B 87.1°F

C 87.4°F

D 88.7°F

13. Mrs. Jones recorded the following grades for the math test:
65, 100, 95, 85, and 70. What was the average (mean) for this test?

A 79

B 83

C 104

D 415

14. After each game the girls' basketball team ate pizza.

Pizza Eaten by Girls' Basketball Team

Game	Slices of Pizza Eaten
1	16
2	14
3	21
4	17
5	19
6	15

What is the mean number of slices of pizza eaten after each game?

A 20

B 17

C 16

D 14

15. The following are Tom's grades in science: 80, 85, 100, 78, 90. There will be only one more test this grading period. What is the lowest grade Tom can make and still have an 85 average in the class?

A 70

B 77

C 86

D 100

16. Which is the prime factorization of 86?

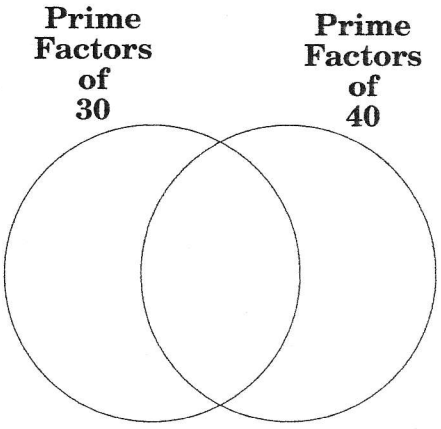
A $3 \times 2 \times 2 \times 2 \times 2 \times 2$

B $2 \times 2 \times 2 \times 11$

C 2×43

D $2 \times 4 \times 11$

17. What numbers belong in the intersection?



A 2 and 3

B 2 and 5

C 3 and 5

D 2, 3, and 5

18. Which of the following is a composite number?

A 2

B 3

C 4

D 5

19. Sasha's locker combination uses three composite numbers. Which of the following could be the combination?

A 4, 27, 39

B 7, 11, 19

C 9, 13, 21

D 18, 26, 59

20. Which statement is true about this set of numbers?

{1, 2, 3, 5, 19}

A All of the numbers are prime.

B All of the numbers are composite.

C They are all odd numbers.

D Four of the numbers are prime.

Mathletes Challenge 2012 Championship (1st half)

Name: _____

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Mathletes Challenge 2012 Championship (1st half)

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