

Name _____

Diagnostic Test

Directions: Circle the best answer for each of the following questions.

- When Jada began collecting stickers at the age of 8, she had 125. Today, she has eight times as many. How many stickers does she have today?
 - 133 stickers
 - 1,000 stickers
 - 500 stickers
 - 860 stickers
- Ernesto decided to put all 351 of his baseball cards into protector sheets. If each sheet holds 9 cards, how many sheets will he need?
 - 360 sheets
 - 342 sheets
 - 3,159 sheets
 - 39 sheets
- Li Ming had eaten 4 times as many cookies as her cousin, Cho, who had eaten $3\frac{1}{4}$ cookies. How many cookies did Li Ming eat?
 - 17 cookies
 - 13 cookies
 - $12\frac{1}{4}$ cookies
 - $12\frac{1}{2}$ cookies
- Each serving of oatmeal needs $1\frac{1}{2}$ cups of water. If we used 18 cups of water, how many servings of oatmeal did we make?
 - 12 servings
 - 27 servings
 - 6 servings
 - 10 servings
- During her summer vacation Samantha worked 30 days. If she earned \$25.00 each day, how much money did she earn for the entire summer?
 - \$34.00
 - \$750.00
 - \$59.00
 - \$175.00



Diagnostic Test *(cont.)*

Directions: Circle the best answer for each of the following questions.

The following table shows the United States population from 1970 to 2000. Use the information for problems 6 and 7.

Year	Population
1970	203 million
1980	226 million
1990	248 million
2000	281 million

6. Estimate how many more people lived in the United States in 2000 than in 1970.
- A. 50 million C. 30 million
B. 70 million D. 80 million
7. Using the information from the table, predict about how many people will be living in the United States in 2010.
- A. 285 million C. 270 million
B. 305 million D. 400 million

This table shows the number of points scored by the Boston Celtics in their last five games. Use the information for problems 8–10.

Game	Number of Points
1	106
2	92
3	104
4	111
5	98

8. Estimate how many points the Celtics have scored in all five games.
- A. 400 points C. 500 points
B. 450 points D. 600 points
9. Estimate how many more points the Celtics scored in their highest scoring game than in their lowest scoring game.
- A. 10 points C. 30 points
B. 5 points D. 20 points
10. Estimate how many total points the Celtics scored in their last two games.
- A. 185 points C. 200 points
B. 190 points D. 250 points



Diagnostic Test *(cont.)*

Directions: Circle the best answer for each of the following questions.

11. What number comes next in the pattern?

1, 3, 6, 10, 15, ____

- A. 30
- B. 21
- C. 20
- D. 16

12. What's the rule for the following pattern?

2, 4, 8, 16, 32

- A. multiply by 2
- B. add 2
- C. add 2, then 4, then 6, then 8
- D. multiply by 2, then by 4, then by 6

13. What shape belongs in the blank space?



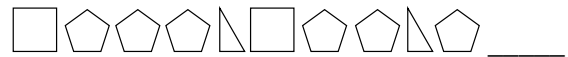
- A.
- B.
- C.
- D.

14. What number belongs in the blank space?

10, 9, 7, 6, 4, __, 1, 0

- A. 1
- B. 5
- C. 2
- D. 3

15. What shape comes next in the pattern?



- A.
- B.
- C.
- D.

16. How many vertices does this shape have?



- A. 2
- B. 4
- C. 6
- D. 8



Diagnostic Test (cont.)

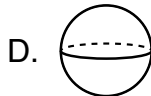
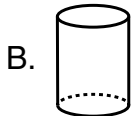
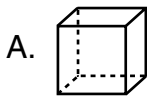
Directions: Circle the best answer for each of the following questions.

17. What is the base shape of this shape?

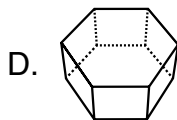
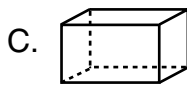
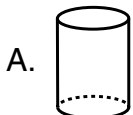


- A. square
- B. circle
- C. cone
- D. cylinder

18. Which of the following shapes is a cylinder?



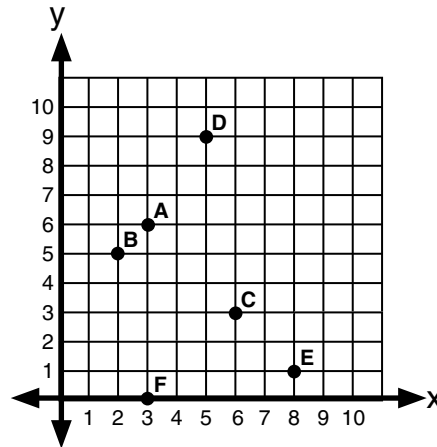
19. Which of the following shapes is a rectangular prism?



20. How many faces does a square-based pyramid have?

- A. 3
- B. 4
- C. 5
- D. 6

Use the following coordinate plane for problems 21 and 22.



21. Which point is shown at (6, 3)?

- A. Point A
- B. Point B
- C. Point C
- D. Point F

22. Which of the following gives the coordinates for Point E?

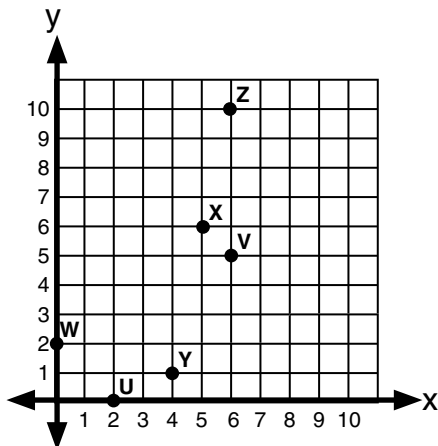
- A. (8, 1)
- B. (-8, 1)
- C. (1, 8)
- D. (-1, 8)



Diagnostic Test *(cont.)*

Directions: Circle the best answer for each of the following questions.

Use the following coordinate plane for problems 23–25.



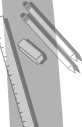
- 23.** Which point is shown at $(2, 0)$?
- Point U
 - Point V
 - Point W
 - Point X
- 24.** Which of the following gives the coordinates for Point X?
- $(5, 6)$
 - $(-5, -6)$
 - $(-5, 6)$
 - $(-6, -5)$
- 25.** Starting at $(2, 3)$, go up 5 and right 3. Name the coordinates of your new position.
- $(8, 5)$
 - $(7, 6)$
 - $(6, 7)$
 - $(5, 8)$
- 26.** If school ends at 2:25, and you notice that the time is now 12:55, how much longer before the school day is over?
- 1 hour 30 minutes
 - 30 minutes
 - 10 hours 30 minutes
 - 1 hour 70 minutes
- 27.** Albert Einstein was born in 1879, and died in 1955. How many years did he live?
- 24 years
 - 76 years
 - 66 years
 - 124 years



Diagnostic Test *(cont.)*

Directions: Circle the best answer for each of the following questions.

28. The longest major league baseball game lasted 8 hours and 6 minutes. If the game started at 7:35 P.M., what time did it end?
- A. 3:41 P.M.
 - B. 5:41 P.M.
 - C. 5:41 A.M.
 - D. 3:41 A.M.
29. The fastest time for a mile run by a man is 3 minutes 43 seconds. The fastest woman ran the mile in 4 minutes 12 seconds. What is the difference in their times?
- A. 1 minute 31 seconds
 - B. 29 seconds
 - C. 69 seconds
 - D. 7 minutes 55 seconds
30. For dinner, Jamal and his family drove to their favorite restaurant, which is 45 minutes away. They were at the restaurant for 50 minutes. If they left the house at 5:00 P.M., what time did they return?
- A. 7:20 P.M.
 - B. 7:35 P.M.
 - C. 6:40 P.M.
 - D. 6:35 P.M.
31. Which unit of measure would be used for the length of a pencil?
- A. metres
 - B. centimetres
 - C. millilitres
 - D. kilograms
32. Luisa used 4 kilograms of flour to make loaves of bread for a bake sale. How many grams of flour did she use? (1 kilogram = 1,000 grams)
- A. 40 grams
 - B. 4,000 grams
 - C. 400 grams
 - D. 2,000 grams
33. What unit of measure would best be used for the weight of a whale?
- A. grams
 - B. metres
 - C. kilograms
 - D. litres



Diagnostic Test *(cont.)*

Directions: Circle the best answer for each of the following questions.

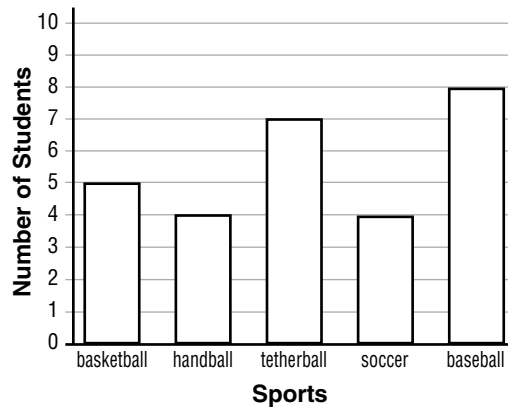
- 34.** There are 2 litres of soda in a regular bottle. If you had 5 bottles of soda, how many millilitres would you have? (1 litre = 1,000 millilitres)

A. 10,000 millilitres
 B. 10 millilitres
 C. 5,000 millilitres
 D. 50 millilitres

- 35.** Anna has 4 metres of yarn for her project, and Maya has 7 metres of yarn. How many more centimetres of yarn does Maya have? (1 metre = 120 centimetres)

A. 300 centimetres
 B. 30 centimetres
 C. 100 centimetres
 D. 600 centimetres

The following bar graph shows the different sports played by students in Mrs. Chan's class. Use the information for problems 36 and 37.



- 36.** Which sport was chosen by the most number of students?

A. basketball
 B. tetherball
 C. baseball
 D. soccer

- 37.** Which two sports are played by the same number of students?

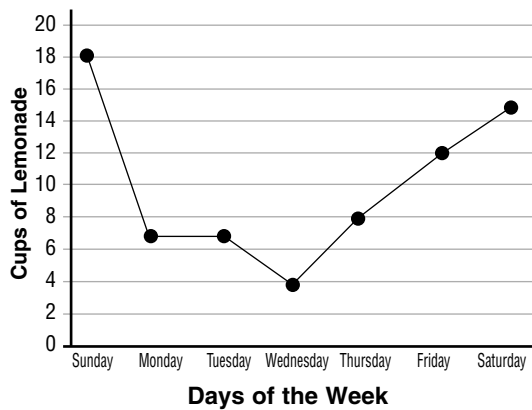
A. soccer and baseball
 B. basketball and baseball
 C. tetherball and basketball
 D. handball and soccer



Diagnostic Test *(cont.)*

Directions: Circle the best answer for each of the following questions.

The line graph below charts the number of cups of lemonade Gina has sold over the last week. Use the information for problems 38–40.



38. During which two days did she sell the most lemonade?
- Saturday and Sunday
 - Friday and Saturday
 - Sunday and Friday
 - Monday and Tuesday

39. During which day did she sell the fewest cups of lemonade?
- Monday
 - Tuesday
 - Wednesday
 - Sunday
40. How many total cups of lemonade did Gina sell during the week?
- 70 cups
 - 61 cups
 - 7 cups
 - 71 cups

