

## Grade 3 Mathematics CRT

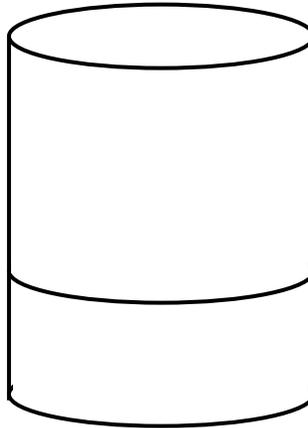
(No Calculators)

1. Complete the following pattern: 36 30 24 18 12 \_\_\_\_\_
2. Which means the same as  $700 + 4$ ?
  - a. 70,004
  - b. 7,004
  - c. 704
  - d. 740
3. Which means the same as 680?
  - a.  $600 + 800$
  - b.  $6 + 8 + 0$
  - c.  $68 + 0$
  - d.  $600 + 80$

4. About how full is the glass?

About:

- a.  $\frac{1}{2}$
- b.  $\frac{3}{4}$
- c.  $\frac{1}{4}$
- d.  $\frac{4}{1}$



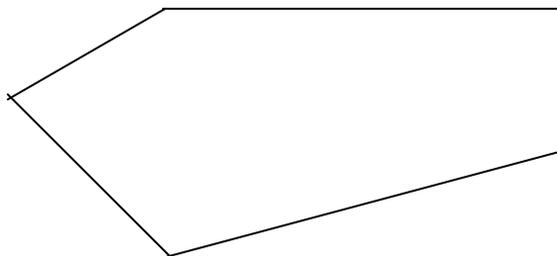
5. Our library has 74 books on bats. This number is CLOSET to:

- a. 80
- b. 60
- c. 70
- d. 50

6. Cathy and her friend sold 48 boxes of girl scout cookies. ABOUT how many boxes of cookies is that?

- a. A little more than 40
- b. A little less than 50
- c. A little more than 50
- d. A little less than 40

7. Measure each side of the shape to the nearest centimeter with your ruler. What is the perimeter of the shape? \_\_\_\_\_

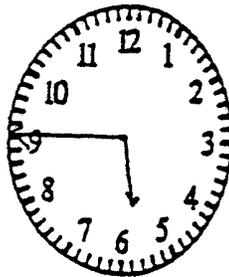


8. It is now 9:30. What time will it be in 2 hours?

- a. 10:45
- b. 11:30
- c. 11:45
- d. 12:00

9. Robert set his alarm clock so that he could wake up early. The alarm went off at the time shown on the clock. What time did the alarm ring?

- a. 6:45
- b. 5:45
- c. 5:15



a.If your brother looked at the clock and said, “It’s quarter to six, we’re going to be late” What time would the clock show?

- a. 5:45
- b. 6:15
- c. 6:45
- d. 6:30

10. Mary overheard her cousin telling her mom she would come to visit on the second Monday in April. What date will that be?

a. April 18

b. April 11

c. April 19

d. April 25

APRIL						
S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

11. Use the above calendar. If your cousin arrives on the second Monday and stays 8 days, what is the date she will leave?

a. April 26

b. April 12

c. April 19

d. April 25

12. Which means the same as 95?

a. 8 tens and 5 ones

b. 7 tens and 5 ones

c. 8 tens and 15 ones

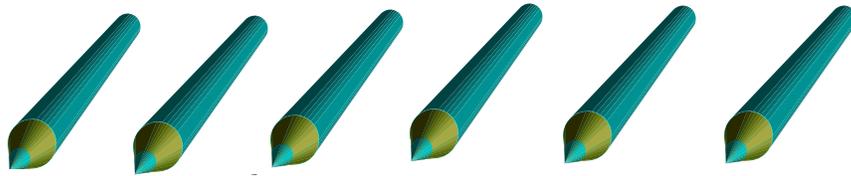
d. 5 tens and 15 ones

13. Which means the same as 6 tens and 16 ones?

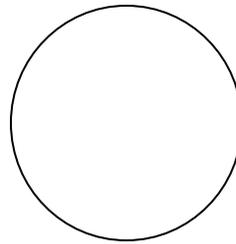
- a. 616
- b. 6010
- c. 66
- d. 76

14. What fraction of the group of colored markers is shaded?

- a.  $\frac{2}{6}$
- b.  $\frac{4}{6}$
- c.  $\frac{2}{4}$
- d.  $\frac{5}{6}$



15. Shade in  $\frac{1}{4}$  of the circle.

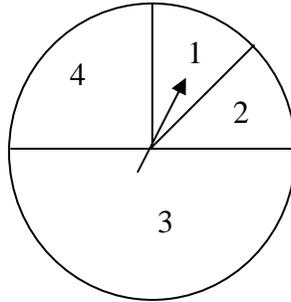


16. Which picture shows  $\frac{2}{3}$  shaded?

- a. 
- b. 
- c. 
- d. 

17. The game which Jack and Tom are playing uses a spinner like the one shown below. Which number will be spun MOST often during their game? Explain.

- a. 1
- b. 2
- c. 3
- d. 4



18. Connie bought her sister a sticker book. It cost \$1.06 here is what Connie got for change.



How much change did Connie get? \_\_\_\_\_

19. John's dad bought him 12 tickets at the school carnival. He wants to know how many rides he can go on. What does he need to know to find out how many rides he can go on?

20. What is a REASONABLE height for a kitchen table?

- a. 3 feet
- b. 3 inches
- c. 3 miles
- d. 3 yards

21. What is a REASONABLE weight of a student in Grade 4?

- a. 70 tons
- b. 70 ounces
- c. 70 pounds

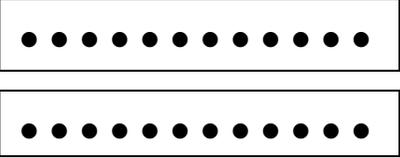
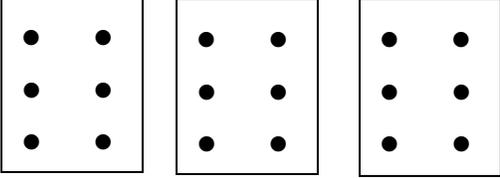
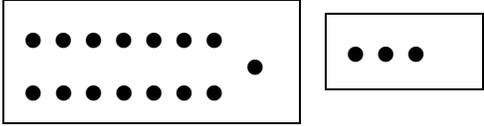
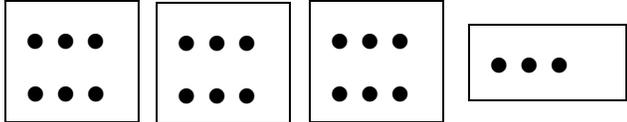
22. Which of the following would most likely be the length of a tube of toothpaste?

- a. 5 inches
- b. 5 feet
- c. 20 inches
- d. 20 feet

23. What is a REASONABLE weight (or mass) of a small button?

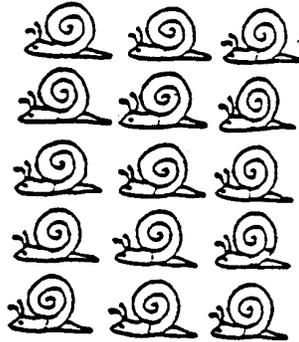
- a. 2 kilograms
- b. 2 grams
- c. 2 liters
- d. 2 milliliters

24. Which picture goes with the number sentence  $18 \div 3$ ?

- a. 
- b. 
- c. 
- d. 

25. Which number sentence goes with this picture?

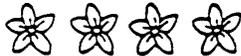
- a.  $15 \div 3 = 5$   
 b.  $5 \times 3 = 15$   
 c.  $15 \times 1 = 15$   
 d.  $3 + 5 = 8$



26. Juan was getting ready to play a game using marbles. He has 24 marbles and wants to share them with his 4 friends. Which fact could he use to find how many marbles he will give each friend?

- a.  $24 \div 4$
- b.  $24 - 4$
- c.  $4 \div 24$
- d.  $4 \times 24$

27. Rodrigo and John made graphs of flowers they saw on their walk. Use the graph to answer the questions 28 and 29.

FLOWERS JOHN SAW	
Daisy	
Rose	
Tulip	
Violet	

Each  stands for 4 flowers

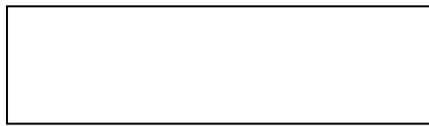
28. What does each flower stand for?

- a. 1 flower
- b. 3 flowers
- c. 2 flowers
- d. 4 flowers

29. How many daisies did John see?

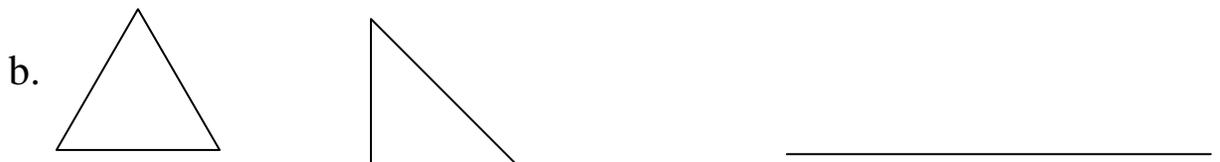
- a. 4
- b. 5
- c. 16
- d. 10

30. Draw a line of symmetry through the rectangle.

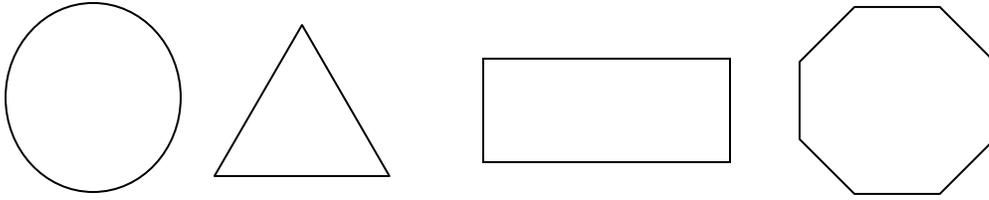


31. Draw a 5 sided polygon.

32. How are the following shapes alike?



33. Which of these shapes are polygons? Explain how you know.



34. Draw the following.

a. a square

\_\_\_\_\_

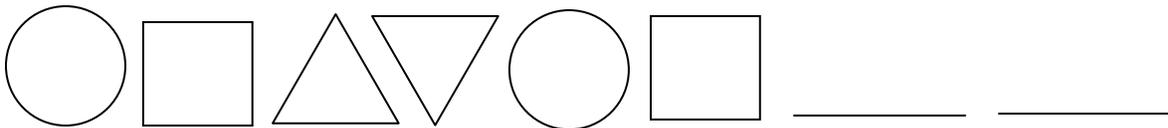
b. a trapezoid

\_\_\_\_\_

c. a hexagon

\_\_\_\_\_

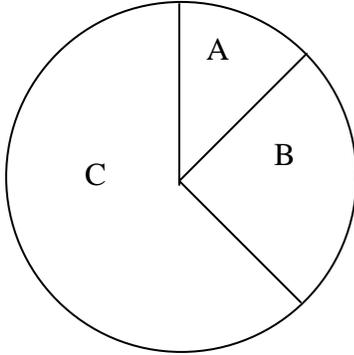
35. What 2 shapes are next in this sequence? Write a sentence that explains how you decided what to draw.



36. Fill in the table.

Golf balls	3	6	9	12
cost	\$5	\$10	\$15	_____

37. Players drop counters onto this game board. A player scores a point each time a counter is completely inside the space with his or her letter.



- a. Is it a fair game? Explain. \_\_\_\_\_

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- b. Which player will probably have the highest score?

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38. Which number belongs in the blank space?

Start	End
20	16
16	12
12	_____
8	4

What is the Rule? \_\_\_\_\_

39. Lisa bought 37 bananas and Mary bought 44 apples. About how many pieces of fruit did they buy together? Which number sentence gives the most REASONABLE estimate?

- a.  $40 + 50$
- b.  $40 + 40$
- c.  $30 + 40$
- d.  $30 + 50$

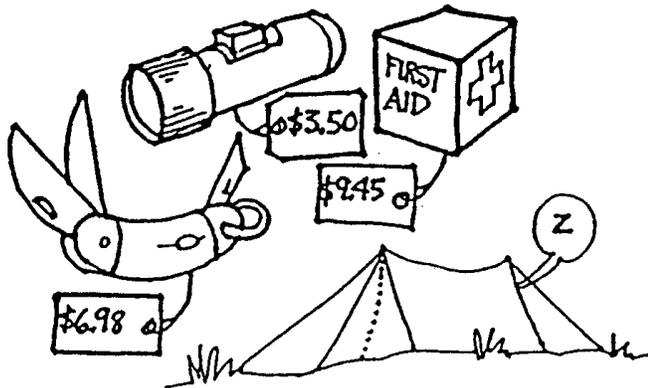
Explain why your answer is reasonable.

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40. Mr. Will Derness bought one first aid kit, one jackknife, and three flashlights. What was the total cost? \_\_\_\_\_



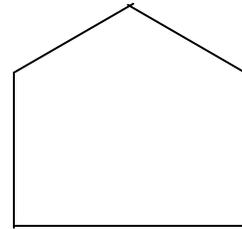
41. Kate found 5 hats and 3 scarves in her closet. Then she found 1 hat and 2 more scarves on a shelf.

How many scarves did she find all together? \_\_\_\_\_

42. How many angles and sides does this figure have?

a. \_\_\_\_\_ angles

b. \_\_\_\_\_ sides



c. What name can we use to describe this shape \_\_\_\_\_?

43. Draw a polygon that has 4 sides. Make 2 sides longer than the other 2 sides.

44. Sarah has 83 basketball cards in her collection. About how many cards does she have? Which would be the best estimate and why?

a. 85

b. 95

c. 80

d. 90

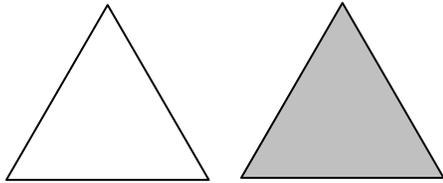
45. An airplane that was due to land at 10:40 was 20 minutes late.

WHAT TIME DID THE PLANE LAND? \_\_\_\_\_

46. I drove my car from Maine to New York. I left at 10:00 a.m. I arrived in New York at 5:00 p.m.

How many hours was I driving? \_\_\_\_\_

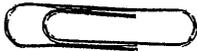
47.



How are these two figures the same?

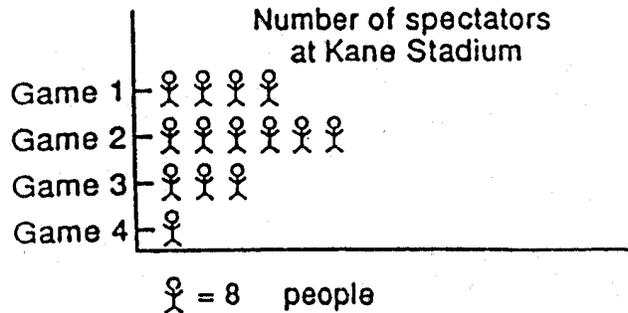
- a. size and shape
- b. size only
- c. shape and coloring
- d. shape only

48. If this paper clip is two inches long, ABOUT how long is the line?



\_\_\_\_\_

49. Use the picture to answer the question below. How many spectators were at Game 3?



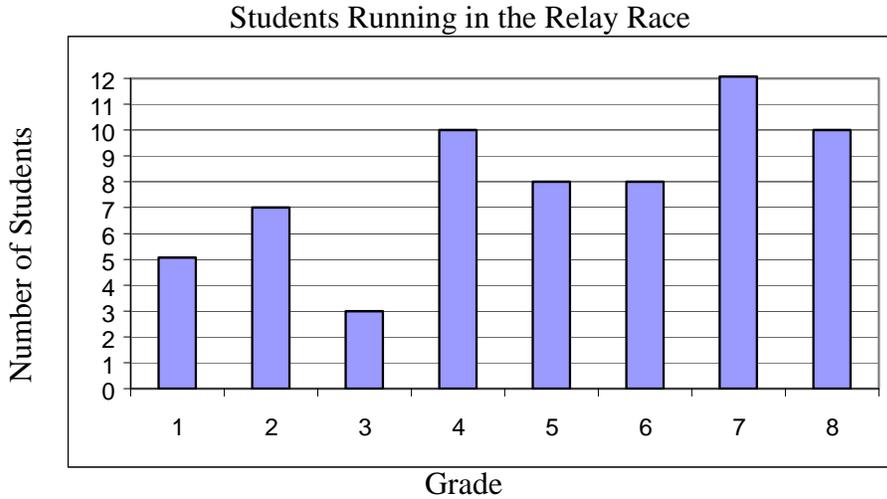
- a. 8
- b. 3
- c. 24
- d. 32

50. Use the table to answer How many napkins will you need for 6 people?

PLANNING A PICNIC

Supplies	4 People	6 People	8 People
Bags of Chips	5	7	9
Cookies	8	12	16
Drinks	6	8	10
Napkins	7	9	11
Sandwiches	4	6	8

51. Use the graph to answer the questions below.



How many more sixth graders than third graders ran in the relay race? \_\_\_\_\_

52. Write 2 more questions this graph could answer for you?

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53. Use your ruler to measure the toothpaste tube to the nearest inch.




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54. Measure the pen to the nearest centimeter.




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55. Use a ruler to draw a line 3 inches long.

56. Use a ruler to draw a line 9 centimeters long.

57. About how many shaded squares will fit in the shape?



58. Draw a picture that represents this number sentence.  $5 \times 6 = 30$

59. Abel put his butterfly collection in the case shown. If each square holds 1 butterfly, which fact can be used to find the number of butterflies the case will hold when full?

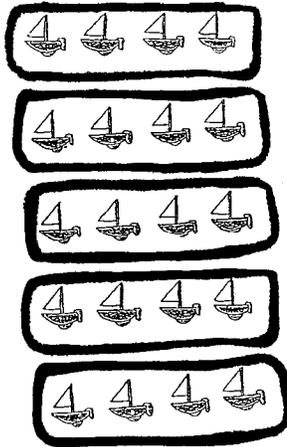
a.  $4 \times 4 =$

b.  $4 \div 4 =$

c.  $4 - 4 =$

d.  $4 + 4 =$


60. Write a division sentence for this picture. \_\_\_\_\_



61. Joe rode his bicycle 28 miles one day. He rode 12 miles the next day. About how many more miles did ride the first day?

a. 10

b. 20

c. 30

d. 40

62. At the pet store, there are 15 kinds of fresh water fish, 6 kinds of salt water fish, and 8 kinds of birds. How many kinds of fish are there at the pet store? \_\_\_\_\_

63. Susan made \$15.00 delivering newspapers. She spent \$11.45 on a birthday present. ABOUT how much does she have left?

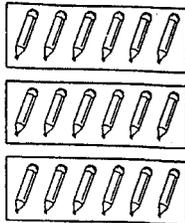
- a. A little more then \$2.00
- b. A little more than \$3.00
- c. A little less than \$4.00
- d. A little less than \$5.00

64. Cleo and Roger rented videotapes for \$15.00 and spent \$38.00 to buy cassette tapes. Which statement shows the most REASONABLE estimate for what they spent?

- a. \$10 + \$40
- b. \$10 + \$30
- c. \$20 + \$30
- d. \$20 + \$40

65. Mrs. Penny divided 18 colored markers equally among three students. Which expression could be used to find the number of markers each student received?

- a.  $18 + 3$
- b.  $3 \div 18$
- c.  $18 \div 3$
- d.  $18 \times 3$



66. Complete each fact family.

$$2 \times 5 = 10$$

$$4 \times 3 = 12$$

$5 \times 2 = 10$

$12 \div 3 = 4$

$10 \div 5 = 2$

$3 \times 4 = 12$

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67. Write the fact family for 2, 4, and 8

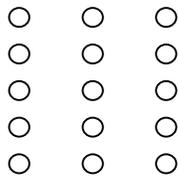
a. \_\_\_\_\_

b. \_\_\_\_\_

c. \_\_\_\_\_

d. \_\_\_\_\_

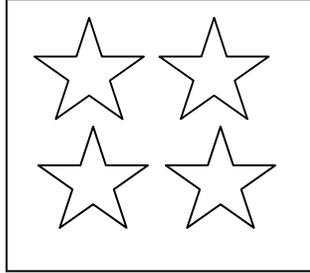
68. Write a multiplication sentence for this picture.



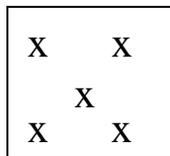
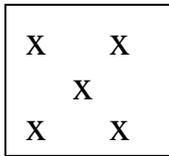
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69. Which number sentence goes with this picture?

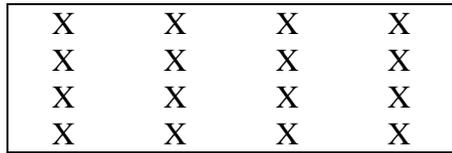
- a.  $8 \div 2$
- b.  $4 \div 2$
- c.  $8 \times 2$
- d.  $2 + 4$



70. Write a division sentence for this picture. \_\_\_\_\_



71. Write a multiplication sentence for this picture. \_\_\_\_\_



72. There were 45 soccer players in a league. 28 new players joined the league. To find out how many players are in the league, you should:

- a. Divide 45 by 28
- b. Subtract 28 from 45
- c. Multiply 28 by 45
- d. Add 28 to 45

73. Angela wants to buy 3 pencils. What does she need to know to figure out how much they will cost?

- a. Who sells them
- b. The cost of each pencil
- c. How much money
- d. How many pens she wants to buy

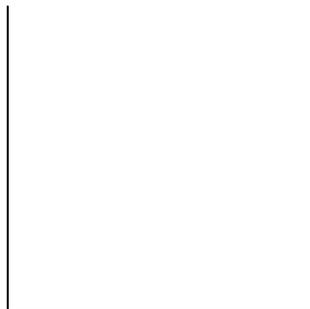
74. A paint store ordered an extra 125 cans of paint for a sale. On Monday, they sold 31 cans of paint. On Tuesday, 53 cans of paint were sold. How many more cans of paint were sold on Tuesday than on Monday? Show your work.

- a. 72
- b. 22
- c. 84
- d. 209

75. Boxes of cookies sold.

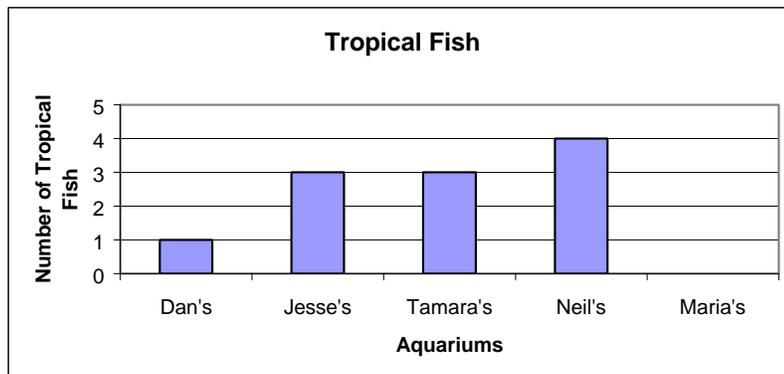
Susan	<del>    </del>
Jill	
Beth	<del>    </del>
Kelly	

Use the data above to create a graph that shows the amount of cookies sold.



76. On Sunday, the bagel shop sold 72 bagels before noon, and 10 more bagels after noon. How many bagels did the bagel shop sell on Sunday? Show your work.

77. The graph below show how many tropical fish are in Dan's, Jesse's, Tamara's, Neil's and Maria's aquariums.



a. One of Neil's fish died. How many fish does he have now? \_\_\_\_\_

b. Who has the most fish? \_\_\_\_\_

c. Who do you think has the largest aquarium? Explain.

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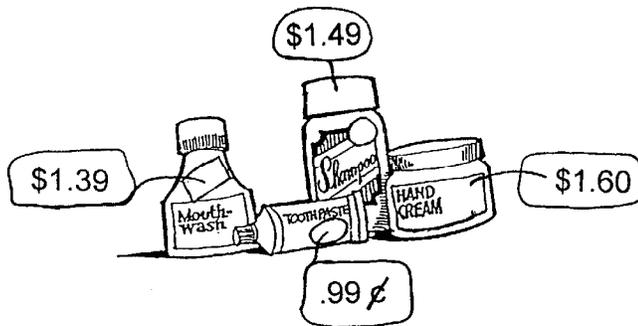
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78. Sue went to the store with \$6.00. She wants to buy all these items. Show your work.

a. How much will it cost her? \_\_\_\_\_

b. Will she have enough money? \_\_\_\_\_



79. The phone store has 25 different phones. 16 phones are black. How many phones are not black? \_\_\_\_\_

80. Mrs. Jones is beginning an exercise program. She plans to walk 2 miles for 2 days, 3 miles for 3 days, 4 miles for 4 days, and continue the pattern until she is walking 6 miles per day. In how many days will she first walk 6 miles? Show your work and Explain your thinking.

81. Shana's teacher asked her to create a design; she needs to use four colors to divide a square into parts, and to color the parts as follows:

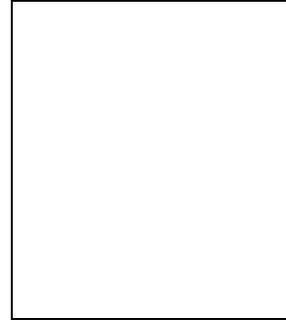
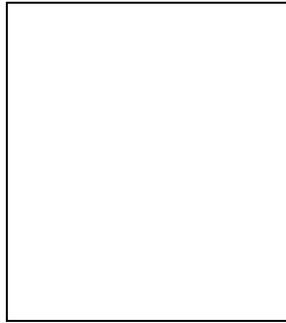
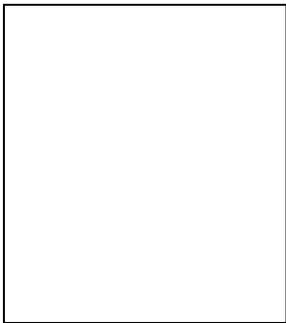
$\frac{1}{2}$  is colored red

$\frac{1}{4}$  is colored blue

$\frac{1}{8}$  is colored green

Any other part is to be left white.

- On the squares below, draw three different designs to help Shana. Each square must contain all four colors.



- On your sketches, write R for red, B for blue, G for green, and F for white.
- Circle one of your designs and explain to Shana how you know that the parts you colored are the correct fractions.

82. Suppose you could earn \$2.00 an hour doing chores for a neighbor. You can earn up to \$40 for the month. Plan a work schedule for the next month to let your neighbor know when you are available. You must stay within your neighbor's budget.

RUBRIC

- 0 Important information is missing or schedule is unclear or figures given are completely unreasonable.
- 1 A schedule is presented but it may not be clear when the student will work or schedule is clear but exceeds the \$40 limit.
- 2 Schedule is clear complete and stays within the limit. There may be a minor error.

83. Suppose you toss some dice and these numbers show up: 6, 5, 6, 7. Use the numbers to answer the following questions. Use each number only once for each answer.

- a. 667 is larger than \_\_\_\_\_
- b. 567 is smaller than \_\_\_\_\_
- c. 6 — 6 is larger than 6 — 6
- d. The smallest number that could be written with these 4 numerals is \_\_\_\_\_
- e. The largest number that could be written with these 4 numerals is \_\_\_\_\_

84. I'm thinking of the following numerals: 0, 1, 4, 5, 8, 9. Use these numerals to answer the following.

a. Write 3 numbers between 450 and 550.

\_\_\_\_\_

b. Write 3 numbers between 4,500 and 5,500.

\_\_\_\_\_

c. Write a 3 digit number larger than 500. \_\_\_\_\_

d. Write a 4 digit number larger than 8,000. \_\_\_\_\_

85. Ten people got onto an empty elevator. At the next floor, 4 people got off and 3 more got on. How many people are on the elevator now? \_\_\_\_\_

86. There was \$137.89 in my piggy bank. I spent \$21.15 on Monday and \$15.50 on Tuesday. How much money is left in my piggy bank?

\_\_\_\_\_

## 87. A Trip To The State Park

Ten members of an outdoor club will be going on a Saturday trip to the state park. The club has \$100 to spend. The group has decided to stay together all day and wants to do at least three different activities.

The park gates open at 8:30 a.m.; the park ranger wants everyone out of the park by 4:00 p.m.

Alan, one of the club members, made a plan for part of the day. Use the Park Map and Activity Costs sheet to check Alan's plan. Keep in mind what the group wants and how much time and money the group has.

### Alan's Plan

What to do	Time	Cost
Get to park	8:30	
Walk to golf	8:30 – 8:45	
All play golf – short course	9:00 – 9:45	10 x \$1 = \$10
Horse riding for 4	Two hours 9:45-11:45	4 x \$5 = \$20
Wagon ride for 6	Two hours 9:45-11:45	1 x \$10 = \$10
Go to playground	11:45 – 12:30	
Play-hiking		
Some eat lunch while the rest go swimming	12:30 – 1:00	

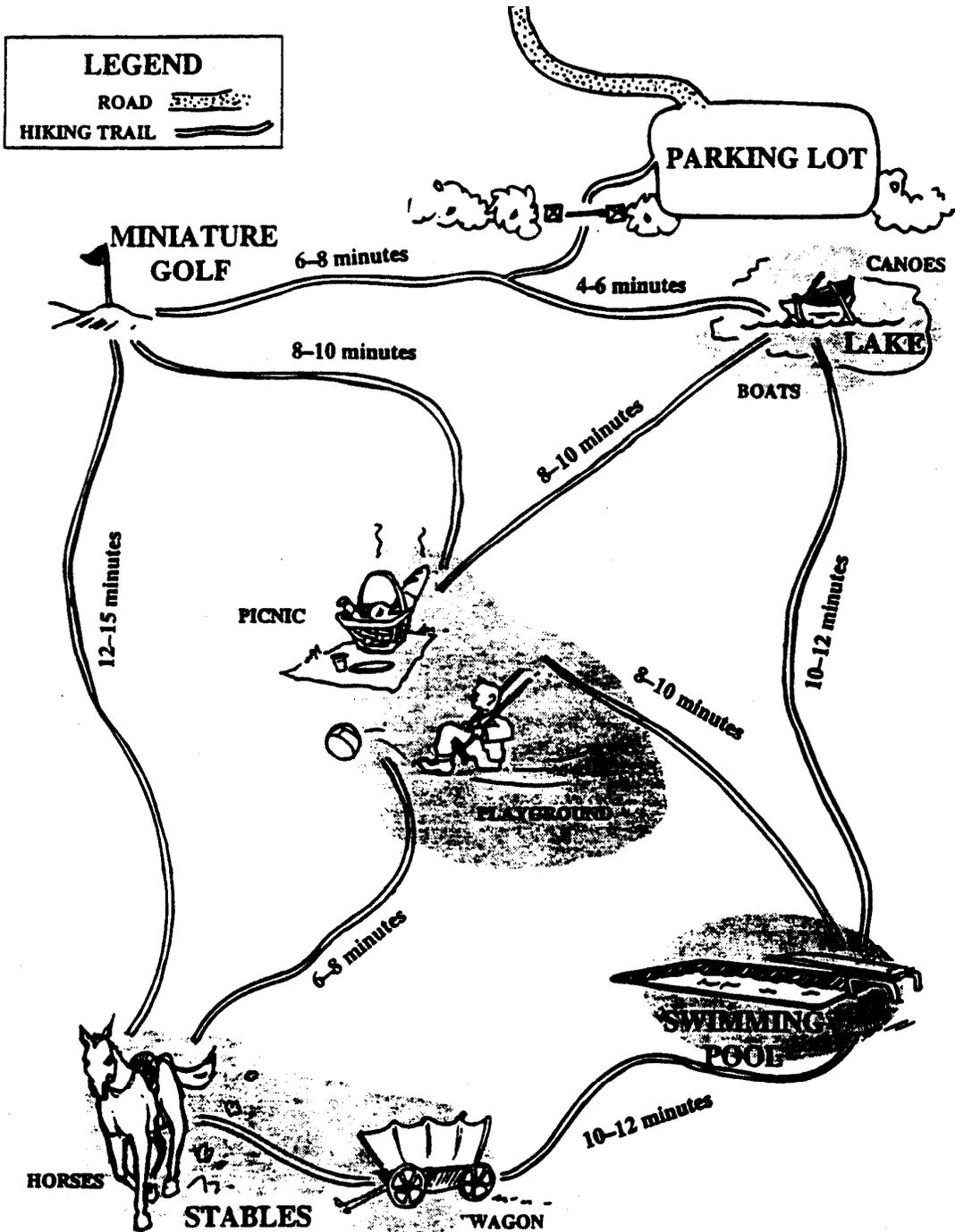
If you see problems with Alan's plan, list them below.

### **Your Job**

Make a plan for the day that would be fun for the group and keeps these things in mind:

- The group will stay together for the day.
- The group wants to do at least 3 different activities.
- The group has \$100 to spend.
- Your plan must fit the times given.

# Park Map



## Activity Cost

<b>Location and Activities</b>	<b>Cost</b>
<b><u>Lake</u></b>	
canoes (limit 4 people per canoe)	each canoe: \$5.00 per 1/2 hour
paddle boats (limit 2 people per boat)	each boat: \$2.00 per 1/2 hour
<b><u>Stables</u></b>	
Horseback riding	each horse: \$5.00 per 1/2 hour
Wagon ride (limit 6 people per wagon)	each wagon: \$10.00 per 1/2 hour
<b><u>Hiking Trails</u></b>	
Hiking	no charge
<b><u>Miniature Golf</u></b>	
Short course (45 minutes per game)	\$1.00 per person
Long course (90 minutes per game)	\$2.00 per person
<b><u>Swimming Pool</u></b>	
Admission (one person)	\$1.50 per day
Lockers	\$.50 each