

Name _____ Date _____

<p style="text-align: center;">(1A)</p> <p>1. Mrs. Forcier had 285 new pencils. Mr. Bassett had 100 fewer pencils than Mrs. Forcier. How many pencils did Mr. Bassett have?</p> <p><input type="radio"/> 185</p> <p><input type="radio"/> 275</p> <p><input type="radio"/> 295</p> <p><input type="radio"/> 385</p>	<p style="text-align: center;">(1A)</p> <p>4. Steve bounced 645 times on the pogo stick without stopping. Jeff bounced 100 times more than Steve did. How many times did Jeff bounce on the pogo stick?</p> <p><input type="radio"/> 655</p> <p><input type="radio"/> 656</p> <p><input type="radio"/> 745</p> <p><input type="radio"/> 746</p>
<p style="text-align: center;">(1A)</p> <p>2. Dennis counted 232 sour balls in his bag. Ann ate 10 of them. How many sour balls are still in the bag?</p> <p><input type="radio"/> 132</p> <p><input type="radio"/> 242</p> <p><input type="radio"/> 222</p> <p><input type="radio"/> 332</p>	<p style="text-align: center;">(1B)</p> <p>5. Which means the same as $300 + 50 + 7$?</p> <p><input type="radio"/> 300,507</p> <p><input type="radio"/> 30,507</p> <p><input type="radio"/> 3057</p> <p><input type="radio"/> 357</p>
<p style="text-align: center;">(1A)</p> <p>3. Ms Boyle had 281 mini-sized popsicles in the freezer. She bought 10 more popsicles. How many popsicles does she now have?</p> <p><input type="radio"/> 181</p> <p><input type="radio"/> 271</p> <p><input type="radio"/> 291</p> <p><input type="radio"/> 381</p>	<p style="text-align: center;">(1B)</p> <p>6. Which means the same as 461?</p> <p><input type="radio"/> $40 + 60 + 1$</p> <p><input type="radio"/> $400 + 60 + 1$</p> <p><input type="radio"/> $400 + 6 + 1$</p> <p><input type="radio"/> $4 + 6 + 1$</p>
	<p style="text-align: center;">(1B)</p> <p>7. Which means the same as $300 + 80$?</p> <p><input type="radio"/> 3,080</p> <p><input type="radio"/> 3,800</p> <p><input type="radio"/> 308</p> <p><input type="radio"/> 380</p>

(1D)

8. In which number does 4 have the **greatest** value?

- 942
- 492
- 249
- 924

(1D)

9. What is the value of 3 in the number 836?

- 6
- 30
- 60
- 300

(1D)

10. The value of 931 would change by how much if 7 replaced 3?

- 4
- 40
- 400
- 4000

(1D)

11. What is the value of 6 in the number 681?

- 60
- 80
- 600
- 800

(4A)

The students in Grades 2, 3, 4, and 5 all collected pennies. The chart below shows how many pennies they collected.

CLASS	NUMBER OF PENNIES
Grade 2	1018
Grade 3	925
Grade 4	1062
Grade 5	987

12. If the number of pennies were listed in order from **least to greatest**, which class would be **third** on the list?

- Grade 2
- Grade 3
- Grade 4
- Grade 5

(4A)


The table below shows how much money four people earned at their summer jobs.

PERSON	MONEY EARNED
Ida	\$5698
Donna	\$4865
Terry	\$4381
Nancy	\$5299

13. Who earned the most money?

- Ida
- Donna
- Terry
- Nancy

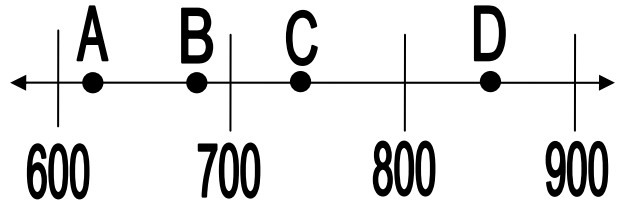
 **\$235**

 **\$129**

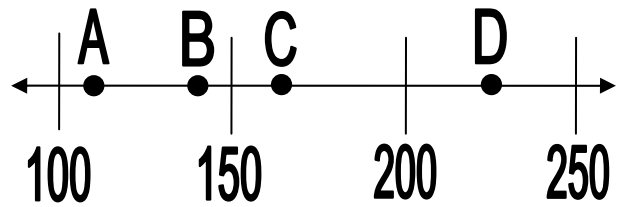
 **\$284**

 **\$349**

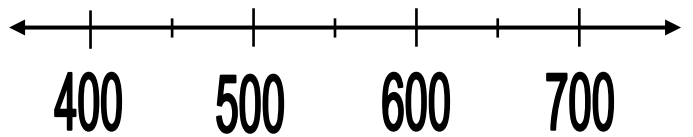
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<p style="text-align: right;">(11A)</p> <p>19. Mount Shasta in California got 105 inches of snow last year. Mount Washington in New Hampshire got 283 inches of snow. About how many more inches of snow did Mount Washington get than Mount Shasta?</p> <p><input type="radio"/> 100</p> <p><input type="radio"/> 200</p> <p><input type="radio"/> 300</p> <p><input type="radio"/> 400</p>	<p style="text-align: right;">(11A)</p> <p>22. Kelly sold between 5 and 10 boxes of Girl Scout cookies every week for 4 weeks. Which could be the number of cookies Kelly sold in all?</p> <p><input type="radio"/> 30</p> <p><input type="radio"/> 45</p> <p><input type="radio"/> 60</p> <p><input type="radio"/> 75</p>
<p style="text-align: right;">(11A)</p> <p>20. Mrs. Barone had \$588. She spent \$198 on a snow blower. About how much money does she have left?</p> <p><input type="radio"/> a little less than 300</p> <p><input type="radio"/> a little more than 300</p> <p><input type="radio"/> a little less than 400</p> <p><input type="radio"/> a little more than 400</p>	<p style="text-align: right;">(11A)</p> <p>23. Mrs. Jones spent \$247 on a present for her mother. She also spent \$490 on a present for her son. About how much money did Mrs. Jones spend altogether?</p> <p><input type="radio"/> less than \$500</p> <p><input type="radio"/> between \$500 and \$600</p> <p><input type="radio"/> between \$600 and \$700</p> <p><input type="radio"/> more than \$700</p>
<p style="text-align: right;">(11A)</p> <p>21. A lion weighs 568 pounds. A giant panda weighs 359 pounds. About how much do the two animals weigh in all?</p> <p><input type="radio"/> less than 600</p> <p><input type="radio"/> almost 700</p> <p><input type="radio"/> about 800</p> <p><input type="radio"/> more than 900</p>	<p style="text-align: right;">(11A)</p> <p>24. Mark paid \$2.85 for batteries. He gave the clerk \$5.00. About how much change should he receive?</p> <p><input type="radio"/> a little less than \$2</p> <p><input type="radio"/> a little more than \$2</p> <p><input type="radio"/> a little less than \$3</p> <p><input type="radio"/> a little more than \$3</p>

(11A)

25. Juan bought a Harry Potter action figure for \$4.09. What is a **reasonable** estimate of the change he received from \$10.00?

- a little less than \$5
- a little more than \$5
- a little less than \$6
- a little more than \$6

(19A)

The graph shows results of a fourth grade survey about things that students like to collect.

FAVORITE OBJECTS TO COLLECT

Object	Number of Students
Money	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Action Figures	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Hot Wheel Cars	<input type="checkbox"/> <input type="checkbox"/>
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Baseball Cards	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

Let = 4 Students

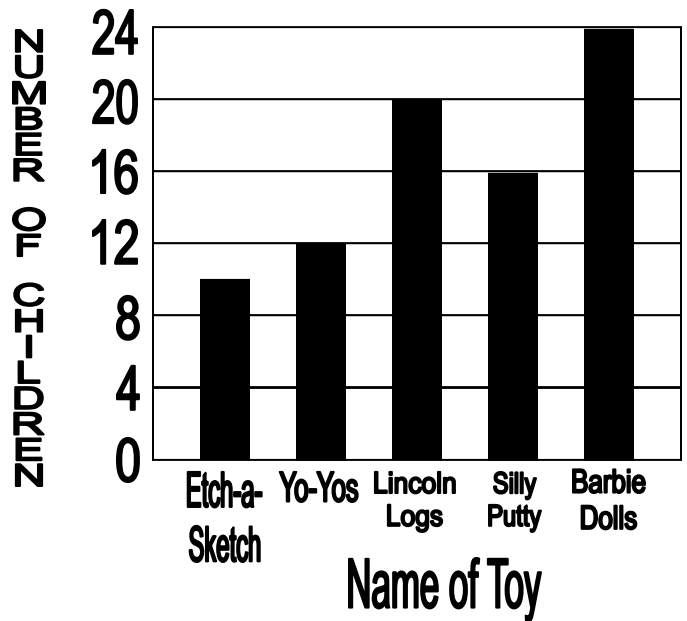
26. How many objects were collected by **fewer** than 10 students?

- 1
- 2
- 3
- 4

(19A)

The **bar** graph below shows the number of children in a class survey who play with toys today that were popular in the 1950's.

FAVORITE TOYS OF TODAY AND LONG AGO



27. What was the total number of children who chose Barbie Dolls and Etch-a-Sketch?

- 22
- 30
- 34
- 44

(21A)

28. Carlotta put 7 red, 3 yellow, 5 blue, and 9 green marbles in a bag. If she pulls out one marble without looking, what is the probability of Carlotta picking a red marble?

- 7 out of 24
- 7 out of 17
- 8 out of 9
- 8 out of 16

(24A)

30. Leah is thinking of a number.

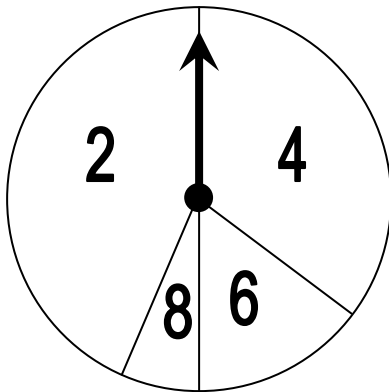
- ◆ It is between 10 and 40.
- ◆ If you count by 4s, you say its name.
- ◆ It can be divided evenly by 10.

What is Leah's number?

- 8
- 20
- 44
- 50

(21A)

29. If Damien spins the arrow one more time, on which number is the arrow **most** likely to land?



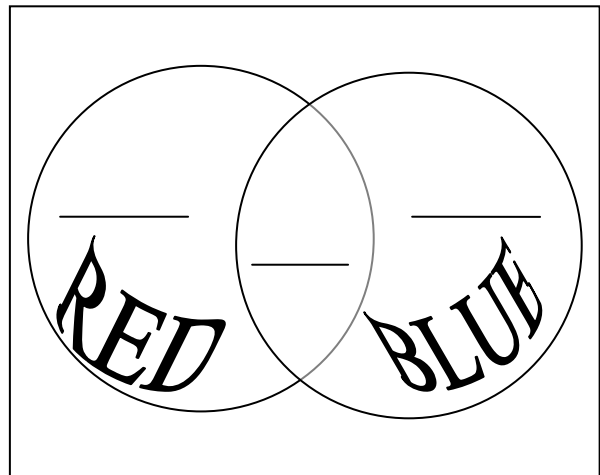
- 2
- 4
- 6
- 8

(24B)

31. Brennan asked 50 children if they liked red or blue.

- ◆ There were 37 children who like red.
- ◆ There were 27 who liked blue .

How many children liked both red and blue? Write the correct numbers on the three lines. Show your work at the bottom of this paper or on another paper.

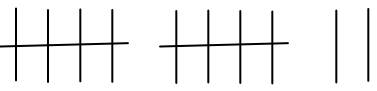
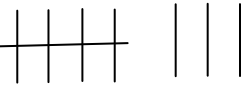


(25A)

32. Laura picked one colored cube out of a box without looking.

- ◆ Some of the cubes were yellow, and some were green.
- ◆ There were 5 cubes in the box.

She put the cube back in the box and picked again until she had done this 20 times. The table shows how many cubes of each color were picked.

Yellow	
Green	

How many yellow cubes do you think were in the box? _____

How many green cubes do you think were in the box? _____

Explain how you determined your answer: _____

Topic 4: Investigating 5-Digit Numbers

SOLUTIONS

- ◆ 1A: Solve problems involving 10/100 more/less than given number
- ◆ 1B: Expanded Notation
- ◆ 1D: Place Value problems
- ◆ 4A: Order of numbers (4-digit numbers)
- ◆ 4B: Magnitude of numbers
- ◆ 4D: Identify numbers on number line
- ◆ 4E: Locate numbers on number line
- ◆ **11A: Identify reasonable estimate to problem**
- ◆ 19A: Identify information in bar graphs
- ◆ 19A: Identify information in pictographs
- ◆ **21A: Probability problems**
- ◆ **24A: Discrete math – solve number riddles**
 - **24B: Venn diagrams (numbers)**
- ◆ **25A: Solve extended problems involving probability**

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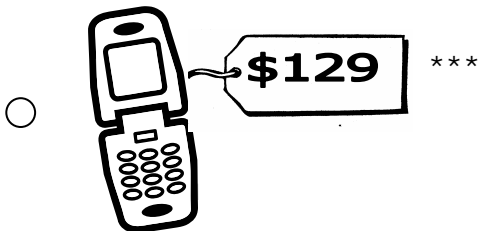
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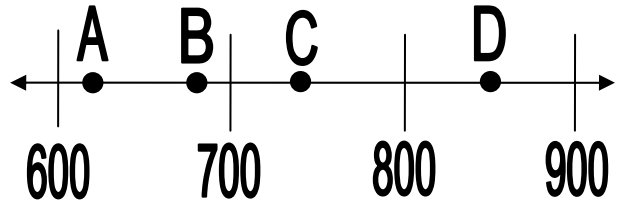
(4B)

14. Jack had \$210 . Which is the only camera phone he has enough money to buy?



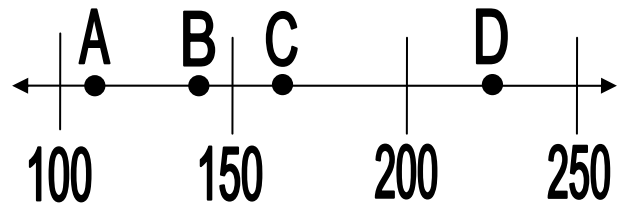
(4D)

16. Which point on the number line **most** accurately shows 680?



- A
- B ***
- C
- D

(4D)



17. What number is marked by letter D on the number line?

- 150
- 175
- 200
- 225 ***

(4B)

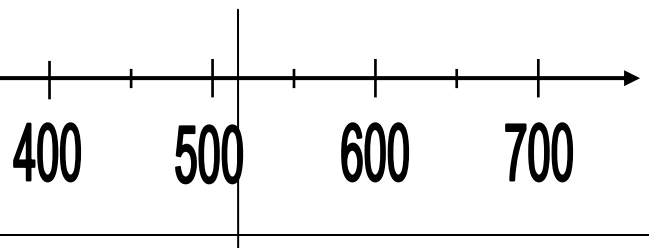
15. The fourth graders read between 375 and 459 pages last week. How many pages did they read?

- 364
- 372
- 440 ***
- 462

Problem 18 could easily become a 2-digit problems by eliminating all the zeros.

(4E)

18. Draw a line through the number line to show where 520 would be.



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- a little less than \$6 ***
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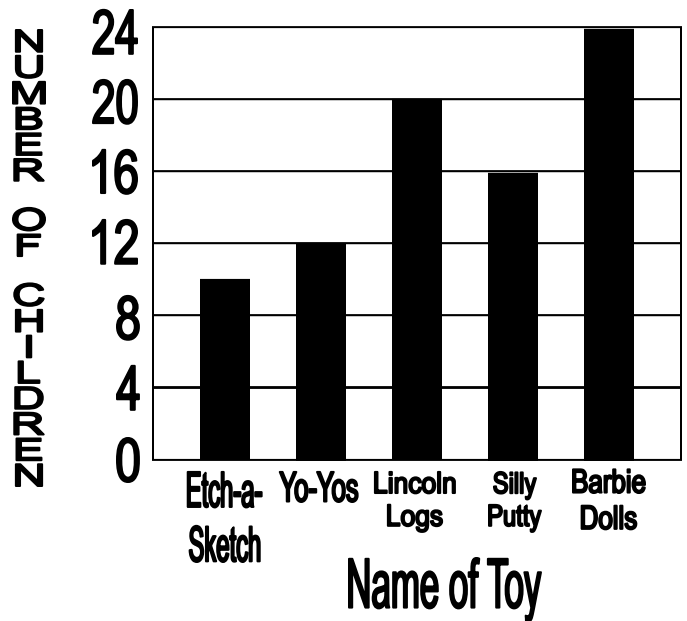
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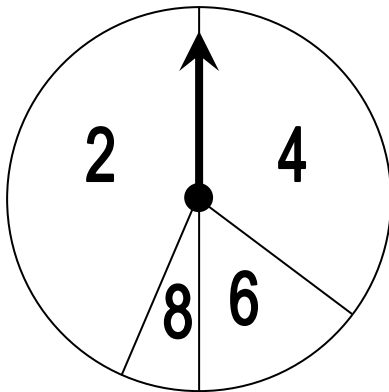
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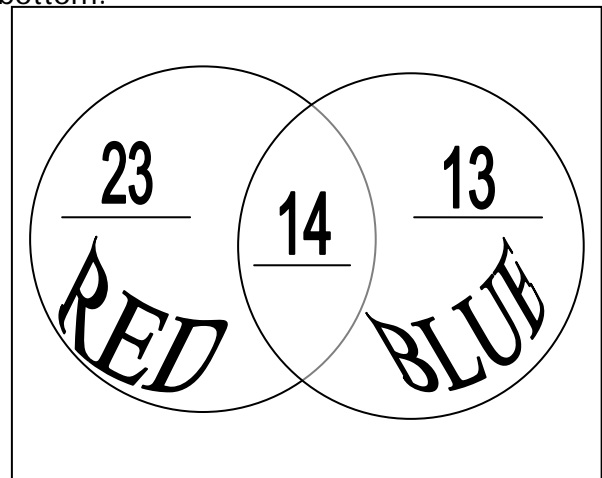
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(24B)

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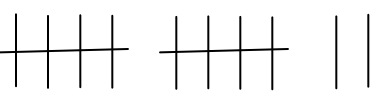

- 1) $37 \text{ red} + 27 \text{ blue} = 64$, but there are only 50 children
- 2) $64 - 50 = 14$ who like both colors.
- 3) $37 \text{ red} - 14 \text{ in the middle} = 23 \text{ red}$
- 4) $27 \text{ blue} - 14 \text{ in the middle} = 13 \text{ blue}$

(25A)

32. Laura picked one colored cube out of a box without looking.

- ◆ Some of the cubes were yellow, and some were green.
- ◆ There were 5 cubes in the box.

She put the cube back in the box and picked again until she had done this 20 times. The table shows how many cubes of each color were picked.

Yellow	
Green	

How many yellow cubes do you think were in the box? _____

How many green cubes do you think were in the box? _____

Explain how you determined your answer:

POSSIBLE SOLUTION:

Best color choices are 3 yellow & 2 green or 2 yellow & 3 green. Out of 20 picks, almost half were yellow and almost half were green (10 of each color would have been exactly half).

Some children may say 8 out of 20 is the same as 2 out of 5 for green and that 12 out of 20 is the same as 3 out of 5 for yellow.

If a student chooses another combination, the reason given will have to support his/her combination.