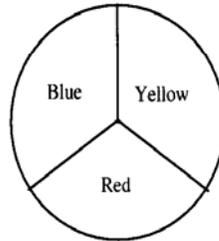
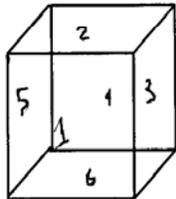


Read problems 2, 3, 4, and 5 on this and the next two pages.
 Select three problems to answer. Answer ALL of the parts of the three problems you select to answer.
 Cross out the one problem that you do not choose to answer.

2. Teresa and Jack were playing a board game. In this game the players have to roll a six-sided number cube and then spin a 3-colored spinner.



- a. What is the probability that Teresa will roll an odd number on the number cube on her first roll? Write the probability as a fraction. Show or explain how you found your answer.

1, 2, 3, 4, 5, 6
 $\frac{1}{2}$
 $\frac{3}{6} = \frac{3 \div 3}{6 \div 3} = \frac{1}{2}$

Handwritten work showing the numbers 1, 2, 3, 4, 5, 6. The numbers 2, 4, and 6 are crossed out with an 'X'. The number 1 is circled. The fraction $\frac{1}{2}$ is written next to it.

**Understanding
Of Situations**

- b. What is the probability that Jack will spin a blue or red on the spinner on his first spin? Write the probability as a fraction. Show or explain how you found your answer.

$\frac{2}{3}$

blue and red are two out of three



- c. Make a list of all possible outcomes if Teresa rolls the number cube and spins the spinner. What is the total number of outcomes? Show or explain how you found your answer.

red	blue	yellow	
1	1	1	18 outcomes $3 \times 6 = 18$
2	2	2	
3	3	3	
4	4	4	
5	5	5	
6	6	6	

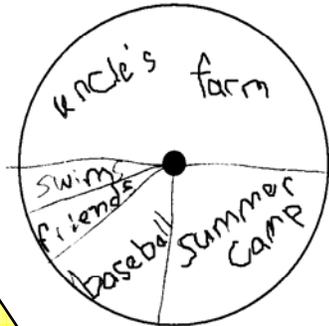
**Well-Defined
Structure**

3. Daryl was excited for summer vacation. The circle below represents Daryl's summer vacation. Daryl spent $\frac{1}{2}$ of his summer on his uncle's farm. He spent $\frac{1}{4}$ of the summer at camp. He spent $\frac{1}{8}$ of the summer playing baseball. He swims $\frac{1}{16}$ of the summer. The rest of the summer is spent with his friends.

a. Using the information above, complete the circle graph below to show how Daryl spends his summer. Label each section of the graph. Show or explain how you found your answer.

DARYL'S SUMMER VACATION

Effective Use of Mathematical Symbols



b. What fraction of his summer is spent playing with friends? Show or explain how you found your answer.

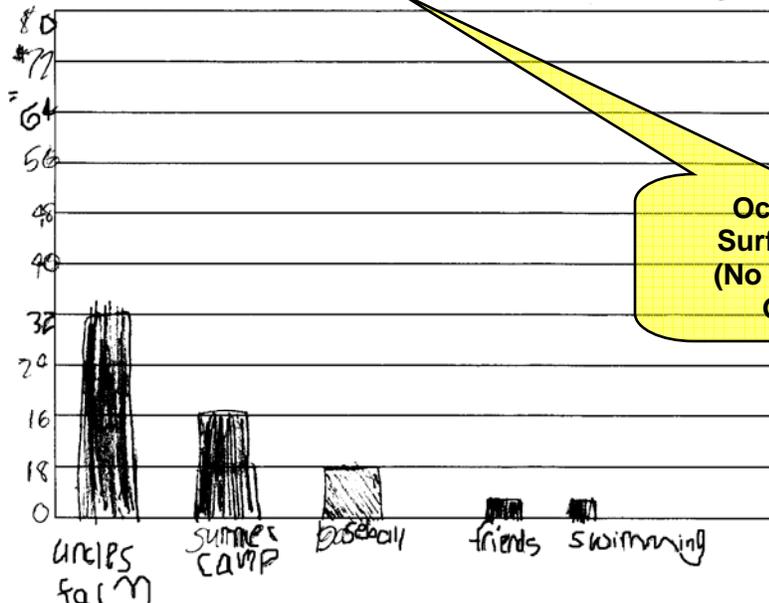
$\frac{1}{16}$ is what's left from $\frac{1}{2}, \frac{1}{4}, \frac{1}{8}, \frac{1}{16}$
there need to be $\frac{7}{16}$ to equal $\frac{1}{8}$ after baseball

c. What fraction of time is spent swimming and playing with his friends? Show or explain how you found your answer.

$\frac{2}{16} = \frac{2}{2} = \frac{1}{8}$ $\frac{1}{8}$ of his time was with his friends and swimming

d. Daryl's summer vacation is 64 days long. Draw and label a bar graph to represent the number of days spent doing each activity.

$$\frac{64}{2} = 32; 2 = 16; 2 = 8; 2 = 4$$



Occasional Surface Error (No Labels on Graph)

4. Joe is earning money to buy a bike. He saved \$10.50 the first month, \$21.00 more the second month, and \$42.00 more the third month.

a. Complete the table below to find the amount he saved in the fourth month, if the pattern continues.

$$\begin{array}{r} \$42.00 \\ + \$42.00 \\ \hline \$84.00 \end{array}$$

Month	Money Saved
1 st	\$10.50
2 nd	\$21.00
3 rd	\$42.00
4 th	\$84.00

$$\begin{array}{r} \$42.00 \\ +21.00 \\ \hline \$21.00 \end{array}$$

b. What was the **total** amount of money Joe had saved by the end of the fourth month? Show or explain how you found your answer.

$$\begin{array}{r} \$10.50 \\ +21.00 \\ +42.00 \\ \hline \$73.50 \end{array}$$

Understanding of Situations

c. The bike costs \$340.00. How many months will Joe have to save in order to have enough money to buy the bike? Show or explain how you found your answer.

$$\begin{array}{r} 584 \\ +184 \\ \hline \$768 \end{array}$$

$$\begin{array}{r} 157.50 \\ +168.00 \\ \hline 325.50 \end{array}$$

6 months

5. Freedom School has a track and field team. They hold the state record in many events.

a. Sandy won the hundred-yard dash in 2003. How many feet are in the hundred-yard dash? Show or explain how you found your answer.

300 ft

1 foot	=	12 inches
1 yard	=	3 feet
1 mile	=	5280 feet

b. Carlos can run a mile in eight minutes. How many feet does he run each minute? Show or explain how you found your answer.

$$\frac{5280}{8} = 660$$

660 feet per min

c. Jamie held the record in cross-country running. He trained by running 9 miles a week. How many yards did he run each week? Show or explain how you found your answer.

$$\begin{array}{r} 5 \\ \times 9 \\ \hline 45 \end{array}$$

$$45 \times 100 = 4,500$$

$$4,500 + 390 = 4,890$$

4,890 yards