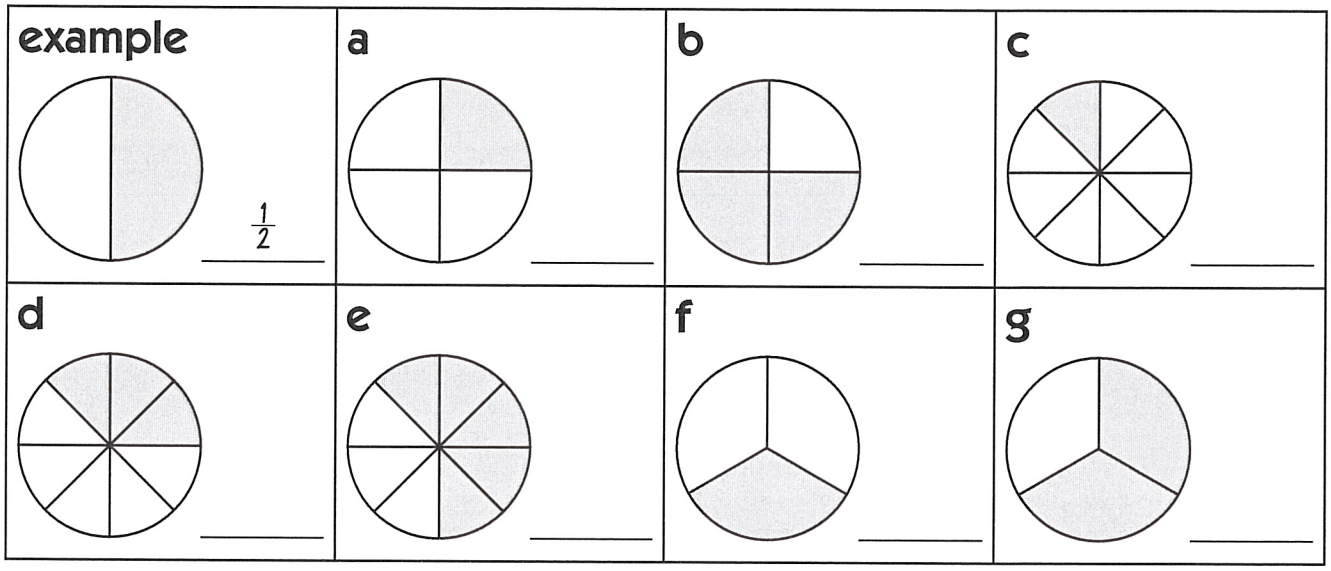
NAME _____ **DATE** _____

More Fractions & Division

1 Write a fraction to show how much of each circle is filled in.



2 Solve the following division problems. The answers can help you with problem 3.

24 ÷ 2 = _____ 24 ÷ 4 = _____ 24 ÷ 8 = _____ 24 ÷ 3 = _____

240 ÷ 2 = _____ 240 ÷ 4 = _____ 240 ÷ 8 = _____ 240 ÷ 3 = _____

3 You can use what you know about division to find different fractions of a number.

example Half of 24 is 12.

a One-third of 24 is _____.

b One-eighth of 24 is _____.

c One-fourth of 24 is _____.

d One-third of 240 is _____.

e Half of 240 is _____.

f One-eighth of 240 is _____.

g One-fourth of 240 is _____.

CHALLENGE

h Three-fourths of 24 is _____.

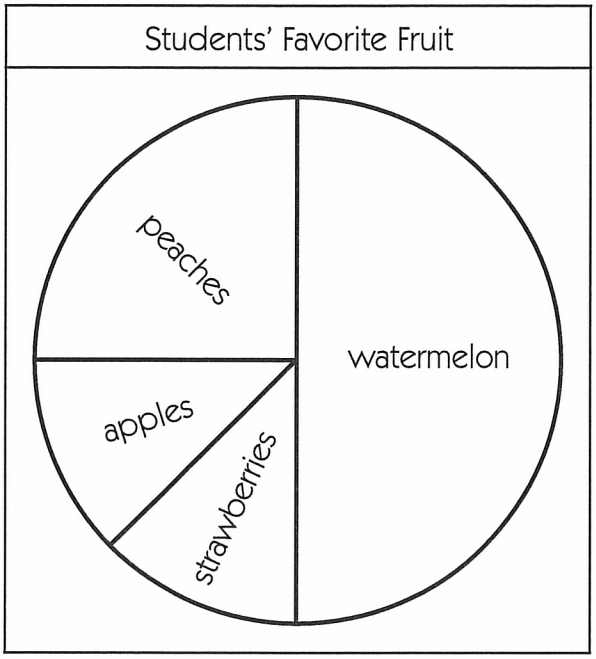
i Two-thirds of 240 is _____.

NAME _____ **DATE** _____

Favorite Fruit Graph

The people working in the cafeteria wanted to know what fruit students like best. They asked the 240 students in the school to pick their favorite fruit. The results are shown on the circle graph below.

1 Which was the most popular fruit?



2 Did more students select peaches or apples?

3 Which two fruits are favored by the same number of students?

4 Exactly half of the students said watermelon was their favorite fruit. What *number* of students said watermelon was their favorite fruit? (There are 240 students altogether.) Show your work.

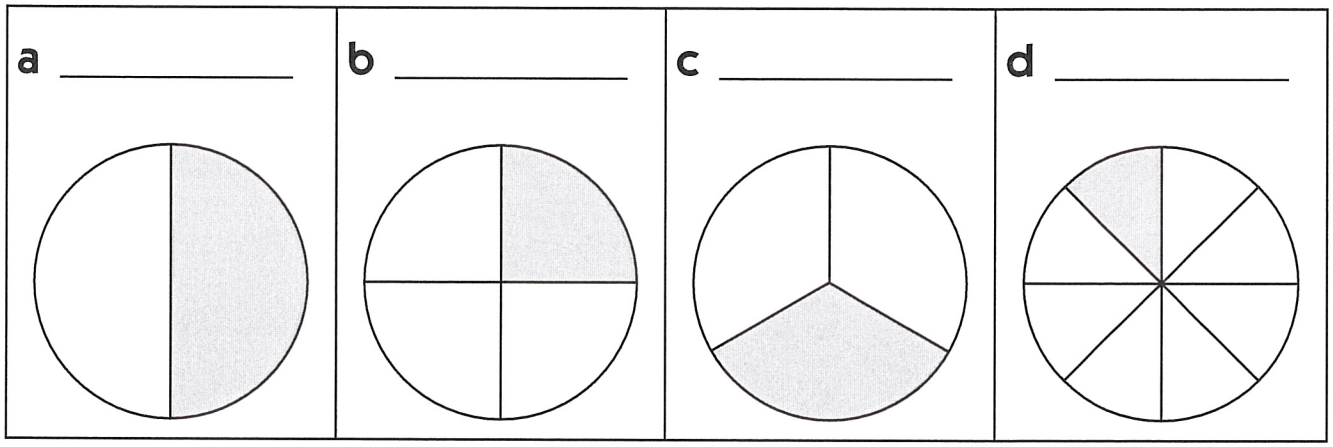
5 Exactly one-fourth of the students said peaches were their favorite fruit. What *number* of students said peaches were their favorite fruit? Show your work.

6 Exactly one-eighth of the students said strawberries were their favorite fruit. What *number* of students said strawberries were their favorite fruit? Show your work.

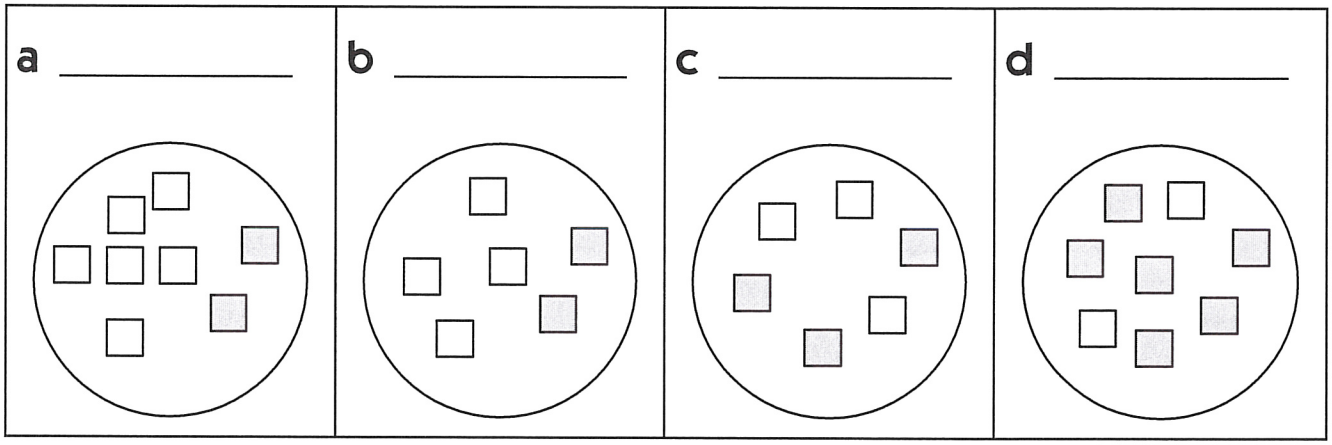
NAME _____ **DATE** _____

Spinner, Tile & Marble Fractions

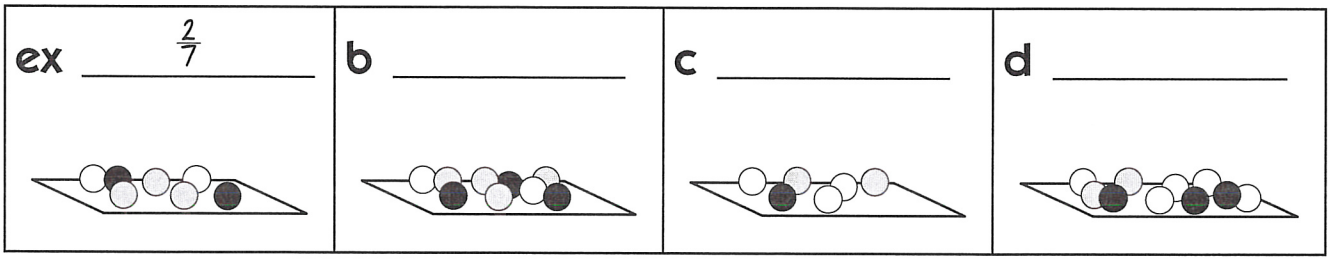
1 What fraction of each spinner is shaded in?



2 What fraction of the tile in each collection are gray? Some collections have 8 tile, and some have 6 tile.



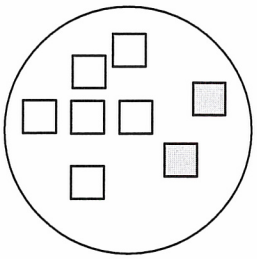
3 What fraction of the marbles in each collection are black?



NAME _____ **DATE** _____

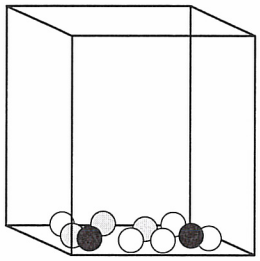
Probability Experiments

1 Chris is going to close his eyes, reach into this bowl, and pull out just 1 tile. What is the probability that it will be gray?



2 Chris is going to close his eyes, reach into a bowl with 240 tile, and pull out just 1 tile. If 120 of those tile are gray, does he have a better or worse chance of getting a gray tile than he did with the small bowl above? Explain your answer.

3 Jackie is going to close her eyes, reach into this bag, and pull out just 1 marble. What is the probability that it will be black?



CHALLENGE

4a Jackie is putting together another bag of marbles. She wants the chances of drawing a black marble to be exactly the same as they were for the bag above. If she puts 20 marbles in the new bag, how many of them would need to be black? Explain your answer.

b If she puts 100 marbles in the new bag, how many of them would need to be black? Explain your answer.

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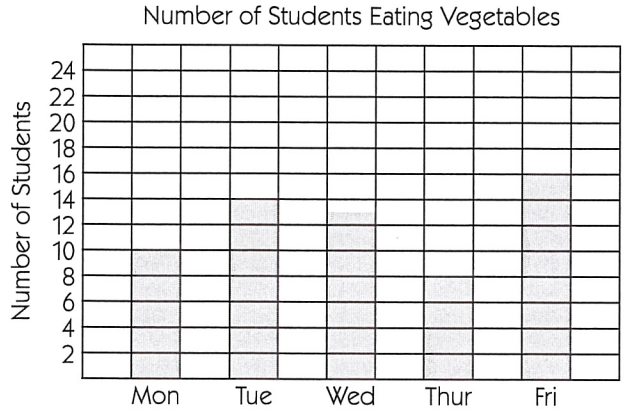
Eating Our Vegetables

1 Mrs. Watson's class is trying to eat more vegetables at lunch. This bar graph shows how many students in her class ate vegetables each day for a week.



a How many students does each box on the graph represent?

b How many students ate vegetables on Friday?

c How many students ate vegetables on Wednesday?

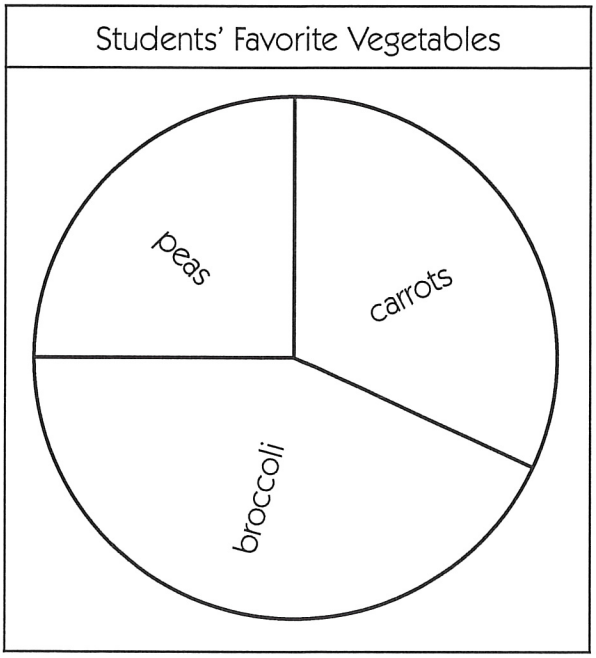
d There are 24 students in the class. On which day(s) did at least half of the class eat vegetables?

CHALLENGE

e On which day did exactly two-thirds of the class eat vegetables? Explain your answer.

CHALLENGE

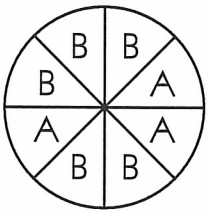
2 Two hundred forty students were asked to choose their favorite vegetable. This circle graph shows the results. Exactly one-fourth of the students picked peas, and exactly one-third picked carrots. How many students said broccoli was their favorite vegetable? Use labeled sketches, numbers, and/or words to explain your answer.

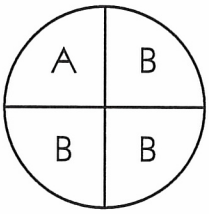


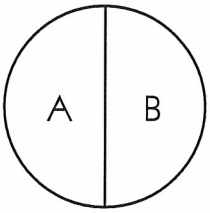
NAME _____ **DATE** _____

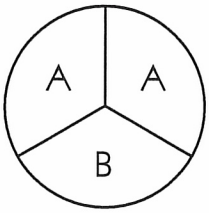
Fair Spinners

1a Amber and Brandon are going to play a game. They are using a spinner to see who gets to go first. If the spinner lands on A, Amber goes first. If the spinner lands on B, Brandon goes first. Circle the spinner that gives each player the same chance of going first.

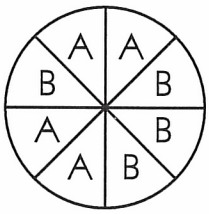




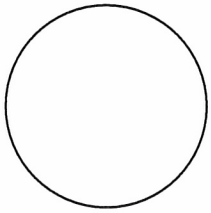




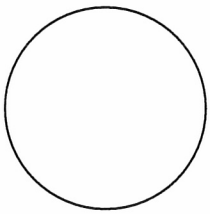
b Brandon didn't think the spinners above were very interesting, so he made the spinner shown below. Is this spinner fair? Explain your answer.



2a Willie, Brett, and Rico are playing a game. They need to make a spinner to decide who gets a point each time. Willie gets a point if the spinner lands on white. Brett gets a point if the spinner lands on blue. Rico gets a point if the spinner lands on red. Sketch a spinner that would be fair for these 3 players. Then explain why it is fair.



b Sketch a different spinner that would be fair for the 3 players. Explain why it is fair.



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Multiplication & Division Practice

1 Solve these multiplication problems using the standard algorithm.

example	a	b	c
21 184 × 36 1,104 + 5,520 6,624	68 × 70	507 × 23	289 × 32
d	**e**	**f**	**g**
356 × 32	209 × 83	447 × 25	387 × 67

2 Complete the following division facts.

56 ÷ 7 = _____ 81 ÷ 9 = _____ 32 ÷ 4 = _____

42 ÷ 6 = _____ 64 ÷ 8 = _____ 35 ÷ 5 = _____

40 ÷ 5 = _____ 21 ÷ 7 = _____ 18 ÷ 3 = _____

CHALLENGE

3 Solve the following problems mentally. Use the facts above to help if you want to.

81 ÷ 3 = _____ 42 ÷ 3 = _____ 64 ÷ 4 = _____

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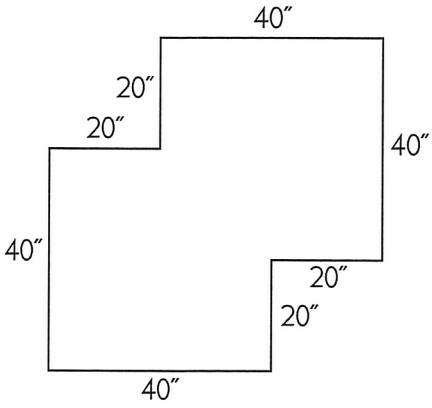
Area & Perimeter, Time & Money

1 Find the area and perimeter of this figure. Show all of your work.



Area _____

Perimeter _____

2a Simon earns $24 per hour. Raymond earns one-half that amount. Simon works 5 hours per day. If Raymond wants to earn the same amount of money as Simon, how many hours would he need to work each day? Show all your work.

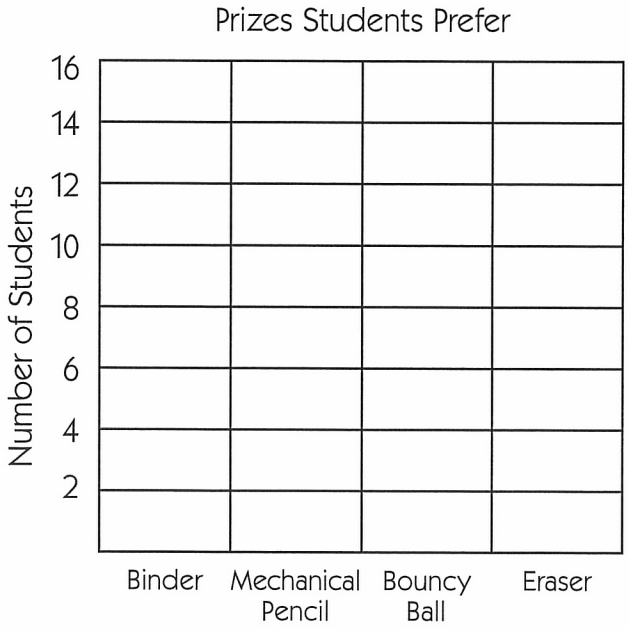
b How much money does Simon make each day? Show all your work.

NAME _____ **DATE** _____

Prizes for Student Helpers

1 Mr. Murphy's students are going to win prizes for helping out around the school. He wants to find out what prizes his students like best so that he can buy them this weekend. The table below shows the results of his survey. Use the table to fill in the bar graph.

Prize	Number of Students
Binder	9
Mechanical Pencil	12
Bouncy Ball	6
Eraser	5



2 Mr. Murphy bought the following prizes for his students. Fill in the total price for each kind of prize.

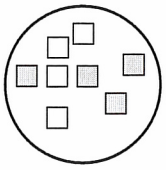
Prize	Number Bought	Price Each	Total Price
a Binder	5	$4.99	
b Mechanical Pencil	20	$2.00	
c Bouncy Ball	10	$0.65	
d Eraser	5	$0.25	

3 Use the information in the table to figure out how much Mr. Murphy spent altogether. Show all your work.

NAME _____ **DATE** _____

Probability Experiments with Tile & Marbles

1a Esteban is going to close his eyes, reach into this bowl, and pull out one tile. What is the probability that the tile will be white?



b Esteban wants to fill the bowl with more tile but keep the probability of pulling out a white tile the same. If he puts 240 tile in the bowl, how many should be white? Explain your answer.

2 Solve the problems below and fill in the answers on the chart.

Problem	Color in the marbles.	Number of Black Marbles
a Ling wants to make a collection of marbles where the chance of pulling out a black marble is $\frac{1}{3}$. Color in some of the 36 marbles to show how many should be black.	○○○○○○○○○ ○○○○○○○○○ ○○○○○○○○○ ○○○○○○○○○	
b Ling wants to change the collection of marbles so that it is twice as likely as it was with the collection above that she will pull out a black marble. Color in some of the 36 marbles to show how many should be black.	○○○○○○○○○ ○○○○○○○○○ ○○○○○○○○○ ○○○○○○○○○	
c Ling wants to change the first collection of marbles so that the chances of pulling out a black marble are half what they were with the first collection. Color in some of the 36 marbles to show how many should be black.	○○○○○○○○○ ○○○○○○○○○ ○○○○○○○○○ ○○○○○○○○○	