Fourth Grade

Color Math

Workbook Samples

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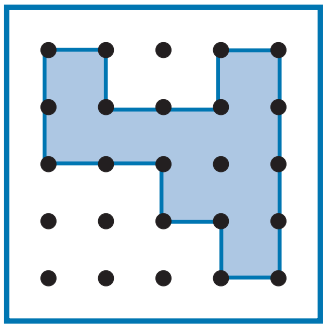
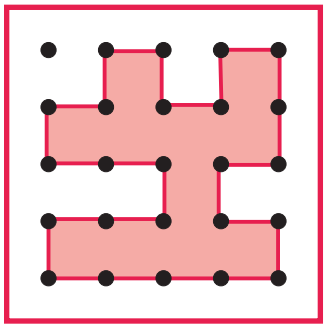
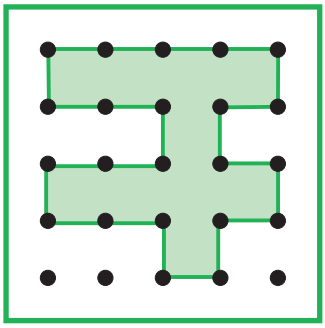
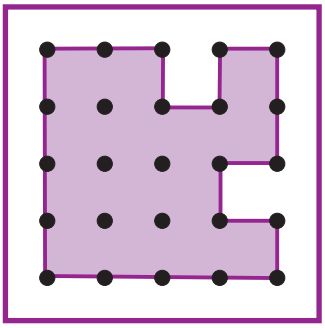
Solve the problems.

65,482	24,053	32,859	71,411
+ 13,209	+ 27,343	+ 46,501	+ 18,667

Make the designs on geoboards. Write the area and perimeter of each design.

units	perimeter	perimeter	perimeter	perimeter
units^2	area	area	area	area

Fractions: fourths

To write the fraction $\frac{1}{4}$ as a decimal, write 0.25

4 quarters = 1 dollar. A quarter is $\frac{1}{4}$ of a dollar.

A quarter can be written as a decimal $0.25 dollar.

Write a fraction and decimal for the colored part of each bar.

fraction decimal

fraction decimal

fraction decimal

Rounding to the nearest 1000: Look at the digit in the hundreds place. If it is less than 5 round down. If it is 5 or greater, round up.

↓<5≥↑

4237 rounds to 4000
4500 rounds to 5000
4896 rounds to 5000

Round these numbers to the nearest 1000.

8379 4503 9168 2726

Lesson 18

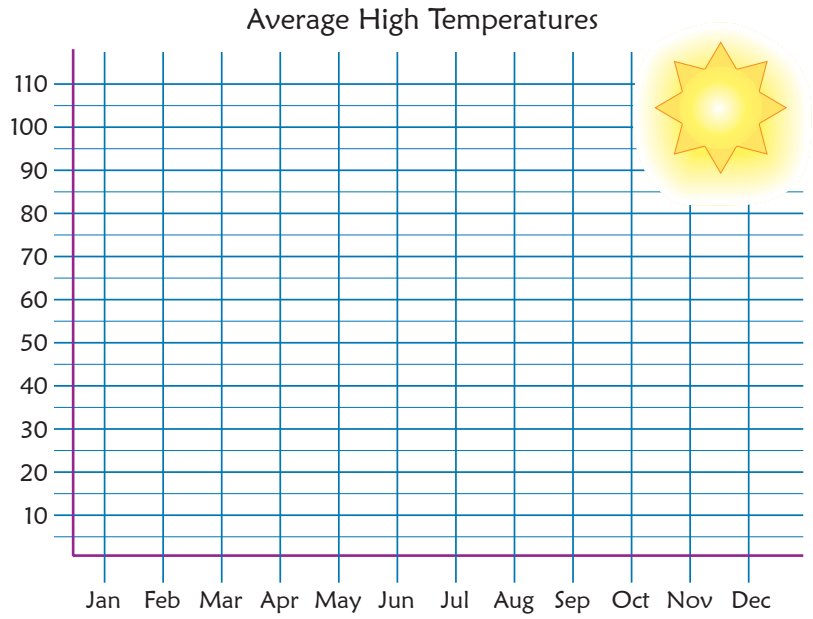
Solve the problems.

31,586	16,273	55,634	63,548
+ 42,899	+ 81,407	+ 24,924	+ 10,998

Plot the data in the table on the line graph.

Average High Temperatures

Jan	38	Jul	90
Feb	44	Aug	89
Mar	56	Sep	80
Apr	67	Oct	69
May	76	Nov	53
Jun	86	Dec	42



Fractions: eighths

To write the fraction $\frac{1}{8}$ as a decimal, write 0.125

Write a decimal for each of the eighths.

$\frac{2}{8}$ ____ $\frac{3}{8}$ ____ $\frac{4}{8}$ ____

$\frac{5}{8}$ ____ $\frac{6}{8}$ ____ $\frac{7}{8}$ ____

Write a fraction and decimal for the color and white parts of each bar.

color fraction	color decimal	white fraction	white decimal

color fraction	color decimal	white fraction	white decimal

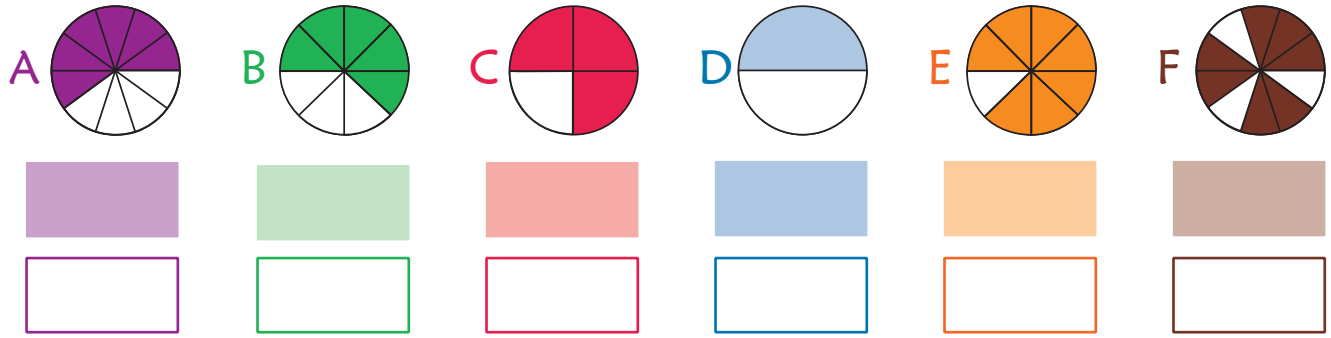
Solve the problems.

26,947	40,595	63,423	79,888
+ 21,388	+ 30,774	+ 11,230	+ 6,754

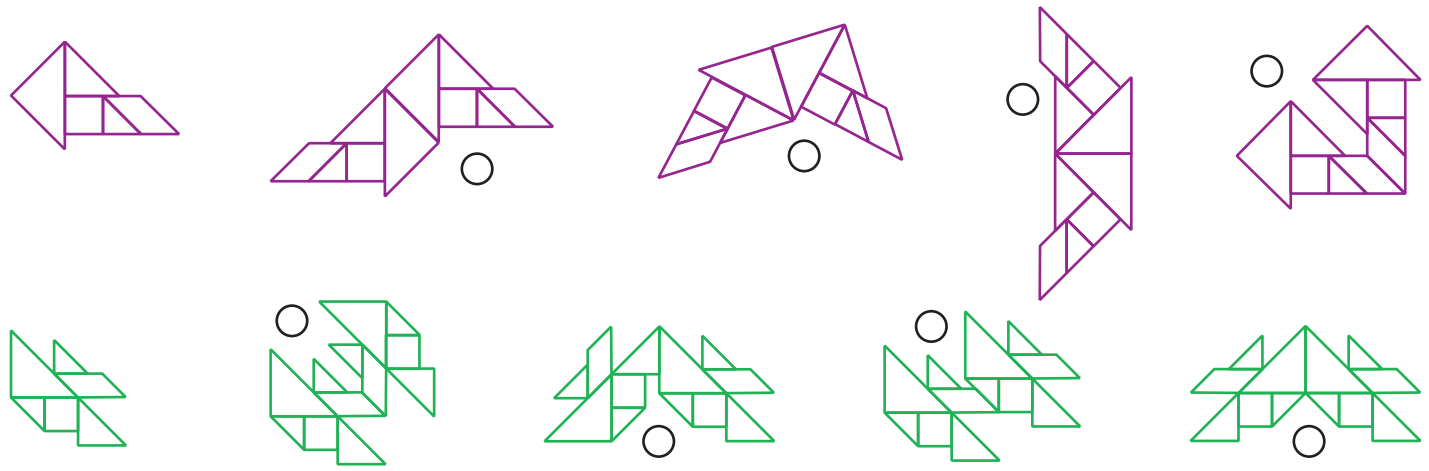
Fractions: halves

To write the fraction $\frac{1}{2}$ as a decimal, write 0.5

Write decimals for the color and white parts of the circles.



Look at the first design in each row. Which designs show flips of the first design? Fill in the circles to mark your answers. There may be more than one answer. Mark all the flips. Use tangrams to find and test your answers. Find another flip for each design using tangrams.



Round these numbers to the nearest 1000.

1623 ◯ 3795 ◯ 2501 ◯ 8286 ◯

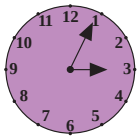
Solve the problems.

99	13	84	42	12	59
34	62	89	50	21	72
+ 76	+ 55	+ 83	+ 27	+ 33	+ 45

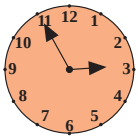
Angles

Angles are measured in degrees. A full circle has 360 degrees. Think of the hands on a clock. In an hour, the minute hand travels 360 degrees.

A right angle has 90 degrees (90°). It would divide a circle into fourths.



An acute angle has less than 90 degrees (90°).



An obtuse angle has more than 90 degrees (90°).

Round these numbers to the nearest ten thousand.

104,563 ____ 228,680 ____ 592,307 ____

Use fraction pieces to find fractions equal to the twelfths.

$\frac{3}{12} = \frac{\quad}{4}$ $\frac{8}{12} = \frac{\quad}{3}$ $\frac{6}{12} = \frac{\quad}{8}$ $\frac{6}{12} = \frac{\quad}{6}$

What is the perimeter and area of the fences represented by the rectangles?

Area and perimeter of rectangles:

A= l x w

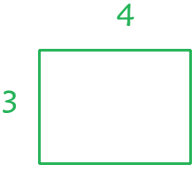
P= 2 x (l + w)

A= _____

P= _____

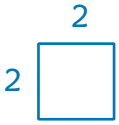
A= _____

P= _____



Can rectangles have equal perimeters but different areas?

○ yes ○ no



A= _____

P= _____

A= _____

P= _____

Lesson 60

Solve the problems.

28 x 46	21 x 93	64 x 58	76 x 37	15 x 84

Solve the problems.

19 35 + 67	22 74 + 46	57 80 + 93	39 49 + 79	88 52 + 60	93 28 + 15

Fill in >, <, or = to make the statements true. Use the fraction overlay sheet and board.

$\frac{2}{3} \bigcirc \frac{8}{12}$	$\frac{3}{4} \bigcirc \frac{3}{5}$	$\frac{6}{7} \bigcirc \frac{6}{9}$	$\frac{10}{16} \bigcirc \frac{10}{10}$	$\frac{4}{6} \bigcirc \frac{6}{9}$
$\frac{8}{16} \bigcirc \frac{5}{10}$	$\frac{15}{16} \bigcirc \frac{7}{8}$	$\frac{3}{10} \bigcirc \frac{1}{3}$	$\frac{2}{5} \bigcirc \frac{2}{4}$	$\frac{6}{7} \bigcirc \frac{5}{6}$

Match the terms to the pictures.

_____ Ray

_____ Diameter

_____ Acute angle

_____ Point

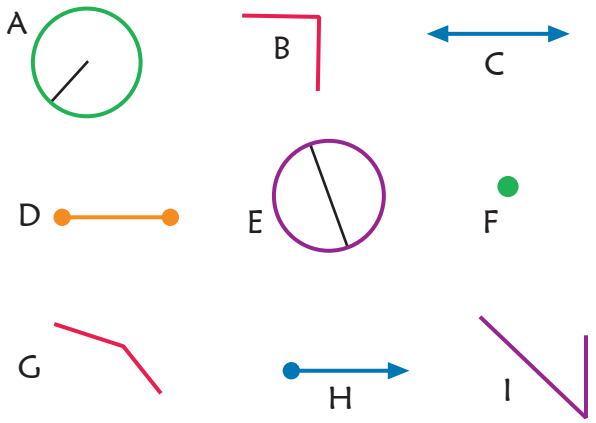
_____ Radius

_____ Obtuse Angle

_____ Line segment

_____ Right Angle

_____ Line



Lesson 69

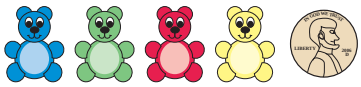
Division with remainders: solve the problems.

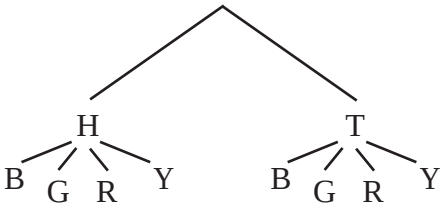
$6\overline{)842}$ $2\overline{)429}$ $8\overline{)895}$ $3\overline{)565}$ $4\overline{)994}$

Calculate the sums of the times.

12d 21h 18m 29s	4d 6h 55m 31s	9d 14h 46m 39s
+ 1d 15h 35m 56s	+ 8d 18h 22m 38s	+ 5d 8h 57m 44s
d h m s	d h m s	d h m s

Probability tree: The probability tree shows the possible outcomes of a coin flip and drawing four counters. Answer the questions below. Write fractions to show the probability.





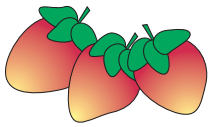
What is the probability for drawing a blue or green counter? _____

What is the fraction for all the tails outcomes? _____

What is the probability of having both heads and yellow? _____

What is the probability of not drawing red? _____

Read the stories. Write the math problem and answers in the space below. You may need to work the problem on another piece of paper.



Nine people picked 892 strawberries. If they had all picked the same amount, how many should each person have picked?

One person picked a few more. How many more did that person pick?

If they packed the same number of strawberries into five baskets, how many strawberries were in each basket?

How many were left over?

Turn the fraction into a division problem to find its decimal equivalent. Solve for up to 3 decimal places.

$\frac{3}{7}$ $7\overline{)3.00}$ $\frac{11}{14}$ $\overline{)\quad}$ $\frac{9}{16}$ $\overline{)\quad}$ $\frac{10}{11}$ $\overline{)\quad}$

Use the distributive property to help do mental math. Write only the last addition step and solve the problems. Example: 4 x 78 = 280+32=312

6 x 67 = _____ 3 x 112 = _____

9 x 29 = _____ 5 x 46 = _____

Fill in the circles in front of the numbers that are divisible by 7.

○ 576 ○ 1,036 ○ 6,538 ○ 5,481 ○ 17,779

What numbers are divisible by 2, 3, 4, 5, 6, 8, 9, 10? Fill in all the ovals to mark your answers. Draw a line through the number if it is not divisible by any of the numbers.

2,160	○2	○3	○4	○5	○6	○8	○9	○10
1,305	○2	○3	○4	○5	○6	○8	○9	○10
9,392	○2	○3	○4	○5	○6	○8	○9	○10
4,329	○2	○3	○4	○5	○6	○8	○9	○10
5,340	○2	○3	○4	○5	○6	○8	○9	○10

Read the schedule to answer the questions.

1. Joe arrived at 9:15. What subject did he miss? _____
2. How much time was spent in recess? _____
3. Was more time spent in reading or language? _____
4. Was more time spent in music or science? _____
5. How long was lunch? _____
6. How much time was allowed for computer lab? _____
7. At what time does recess end? _____
8. How much time was allowed for math? _____
9. What time does school end? _____
10. What is the class studying at 12:50? _____

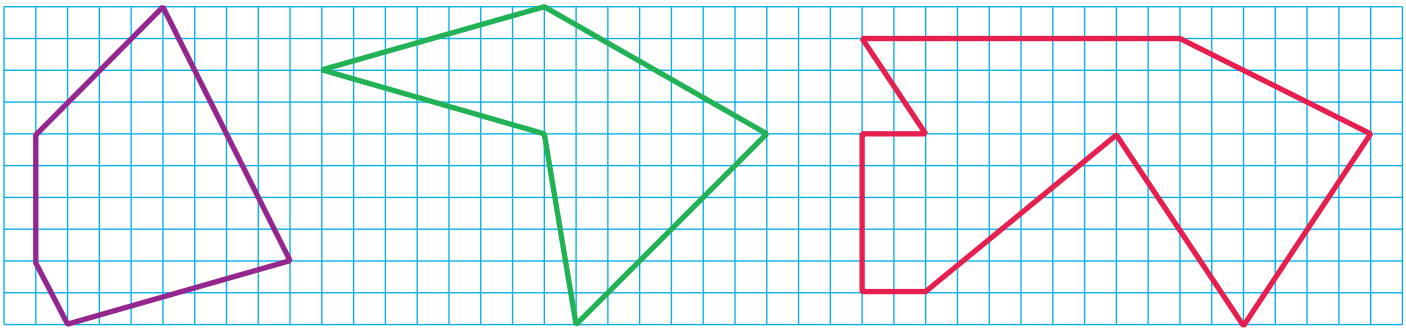
School Schedule:

8:25	Arrive - seat work
8:40	Spelling
9:10	Reading
10:10	Language
10:45	Recess
11:05	Math
12:05	Lunch
12:35	Social Studies
1:00	Music
1:35	Computer Lab
2:15	Science
3:00	Clean-up/ Pack-up
3:15	Dismiss

Division: Find the quotients and remainders.

$84\overline{)5340}$ $33\overline{)8205}$ $57\overline{)5863}$ $19\overline{)9194}$

Find the area of the shapes. Write the answers on the lines.



A=_____ A=_____ A=_____

A group of children were tossing beanbags on targets that looked like the ones below. Categorize the probabilities for the outcomes for each time bags landed on a target. Abbreviate Im, Un, Eq, Li, Ce.

The probability of a toss landing on:

1. the blue section of target D _____
2. the red section of target D _____
3. the purple section of target A _____
4. the blue section of target B _____
5. the green section of target E _____
6. the orange section of target A _____