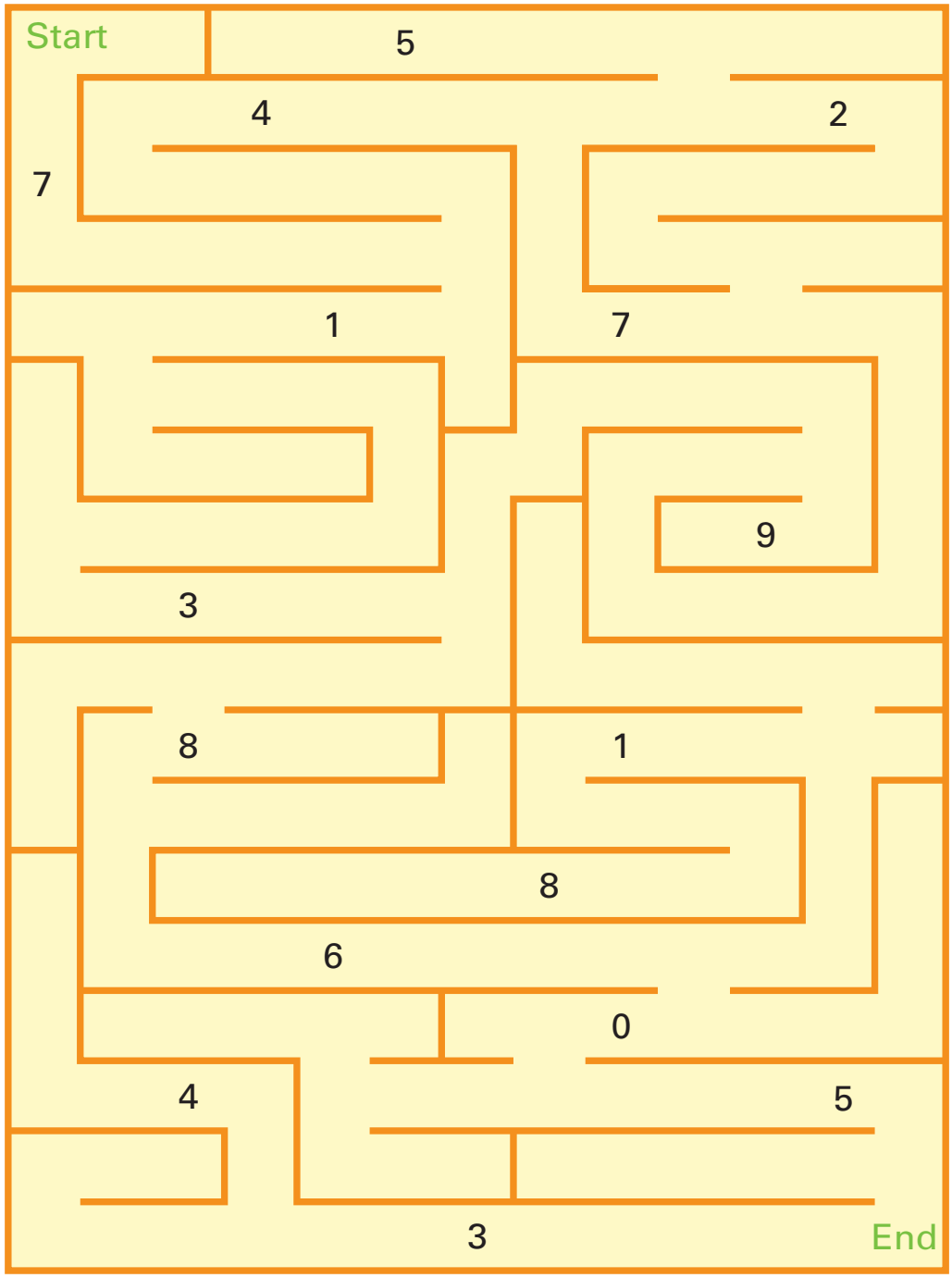
Section 2:
Summer Smart Math

1 Place Value

Secret Number

DRAW a line to get from the start of the maze to the end without taking any extra paths. WRITE each number you cross in order, starting with the millions place, to find the secret number.



Secret number: _____

Number Search

WRITE each number. Then CIRCLE it in the puzzle.

HINT: Numbers are across and down only.

1. eighty-four thousand, one hundred sixty-five 84,165
2. four million, six hundred seventy-two thousand, two hundred forty-four _____
3. nine hundred sixty-one thousand, seven hundred twenty-three _____
4. twenty-nine thousand, eight hundred eleven _____
5. one hundred fifteen thousand, seven hundred thirty-six _____
6. two million, eighty-two thousand, six hundred forty-one _____
7. five hundred five thousand, six hundred ninety-two _____
8. three million, nine hundred thirty-seven thousand, two hundred sixty _____

2	9	8	1	1	0	0	2
9	5	0	5	6	9	2	0
8	1	8	2	4	6	7	8
2	4	4	9	9	1	3	2
0	5	1	1	5	7	3	6
3	4	6	7	2	2	4	4
6	0	5	3	7	3	4	1
3	9	3	7	2	6	0	8

2 Just Right

WRITE each of the numbers to correctly complete the sentences.

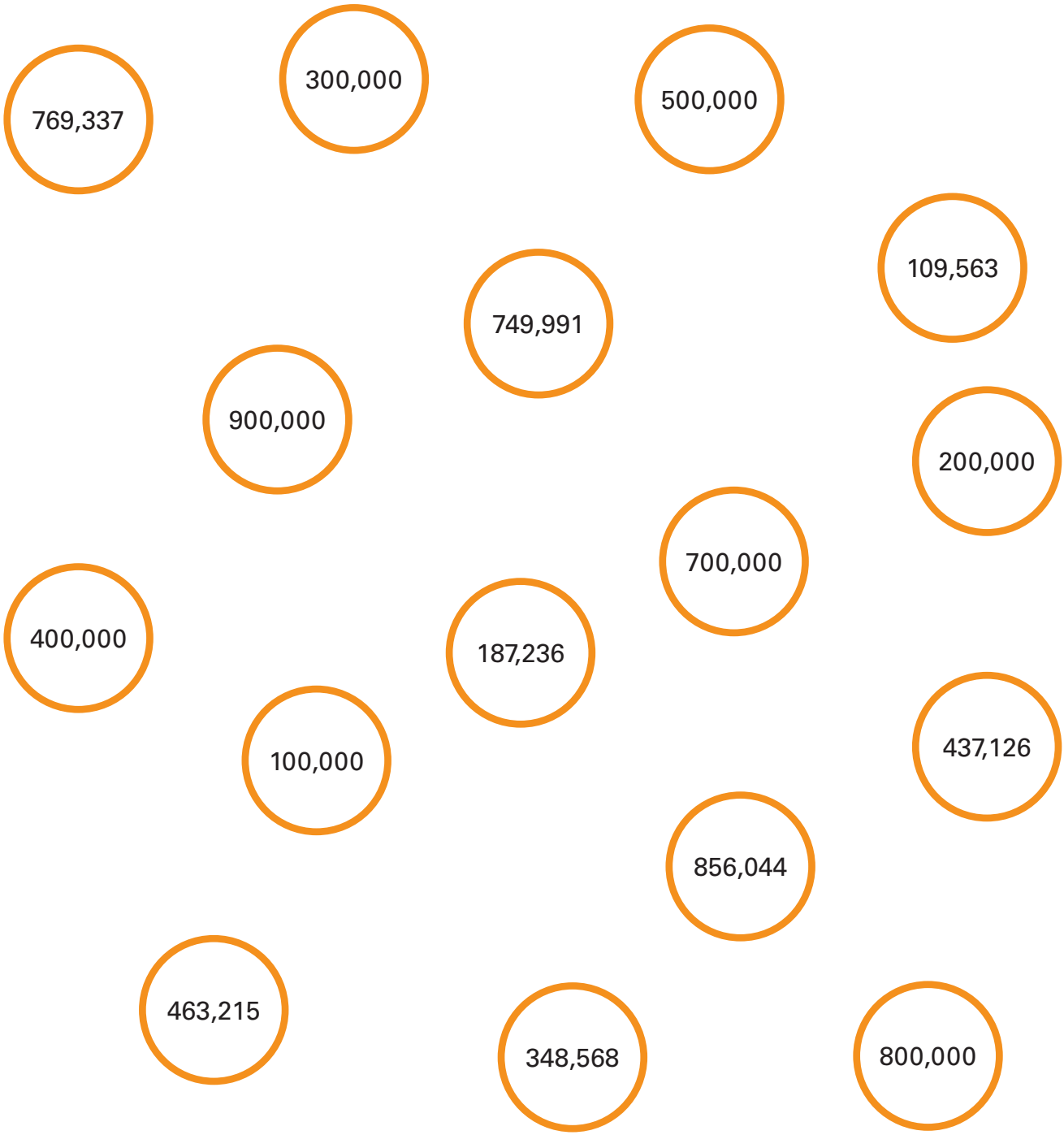
HINT: There may be more than one place to put a number, but you need to use every number.

341,156	392,382	275,319	337,236	232,981
384,620	228,864	382,495	246,518	

1. _____ rounded to the nearest thousand is 229,000.
2. _____ rounded to the nearest ten thousand is 340,000.
3. _____ rounded to the nearest hundred thousand is 300,000.
4. _____ rounded to the nearest ten thousand is 380,000.
5. _____ rounded to the nearest thousand is 382,000.
6. _____ rounded to the nearest hundred thousand is 400,000.
7. _____ rounded to the nearest ten thousand is 230,000.
8. _____ rounded to the nearest thousand is 337,000.
9. _____ rounded to the nearest hundred thousand is 200,000.

Picking Pairs

DRAW a line to connect each number with that number rounded to the nearest hundred thousand.



2 Rounding

Just Right

WRITE each of the numbers to correctly complete the sentence.

HINT: There may be more than one place to put a number, but you need to use every number.

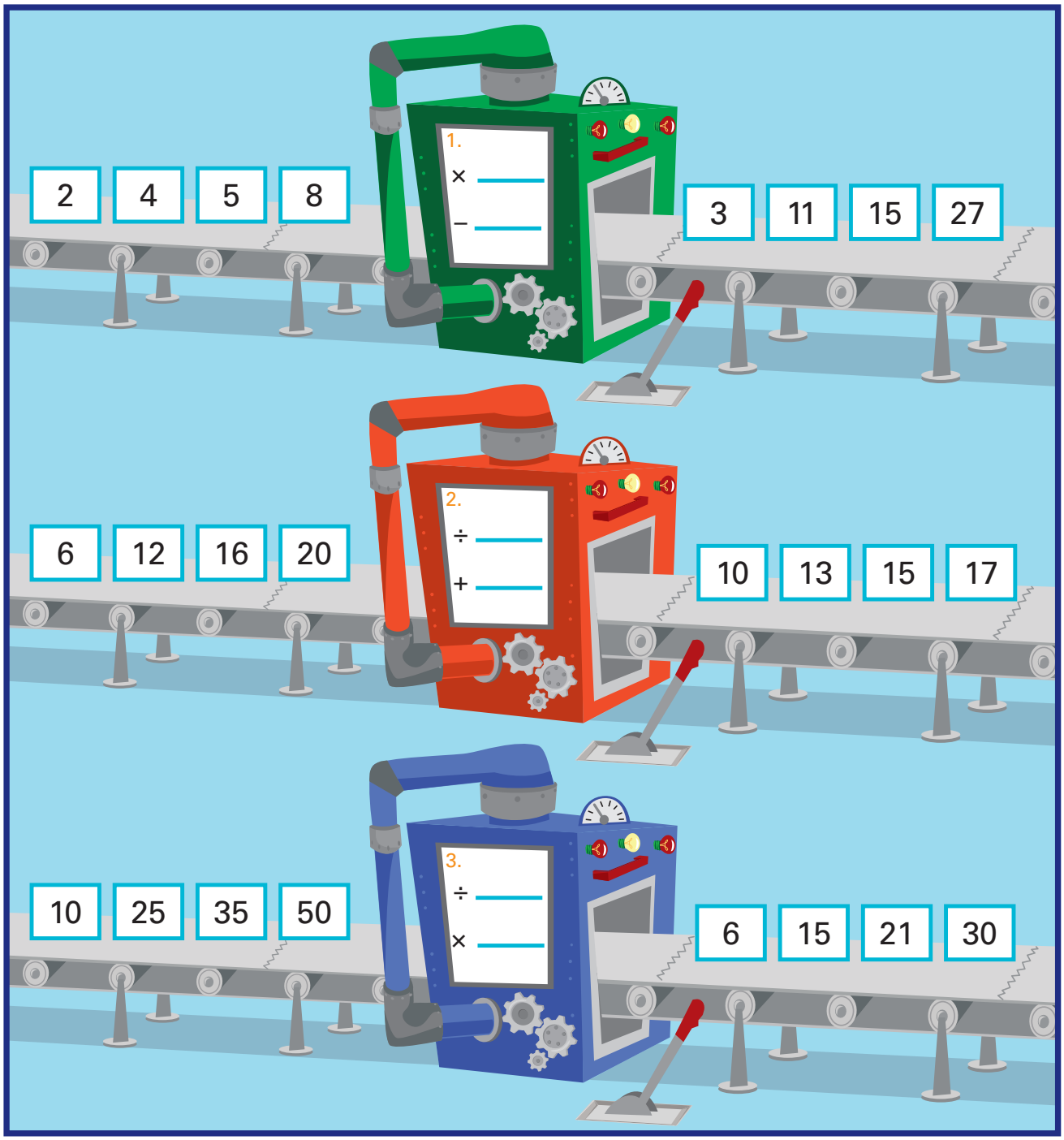
5,418,163	5,908,752	5,826,138	6,692,556	5,237,564
6,694,204	5,879,215	5,418,921	6,563,827	

1. _____ rounded to the nearest million is 5,000,000.
2. _____ rounded to the nearest hundred thousand is 5,400,000.
3. _____ rounded to the nearest ten thousand is 5,910,000.
4. _____ rounded to the nearest hundred thousand is 6,700,000.
5. _____ rounded to the nearest thousand is 6,694,000.
6. _____ rounded to the nearest million is 7,000,000.
7. _____ rounded to the nearest hundred thousand is 5,900,000.
8. _____ rounded to the nearest thousand is 5,419,000.
9. _____ rounded to the nearest million is 6,000,000.

Number Factory

WRITE the numbers that belong on the side of each machine.

HINT: The numbers are all between 1 and 10.

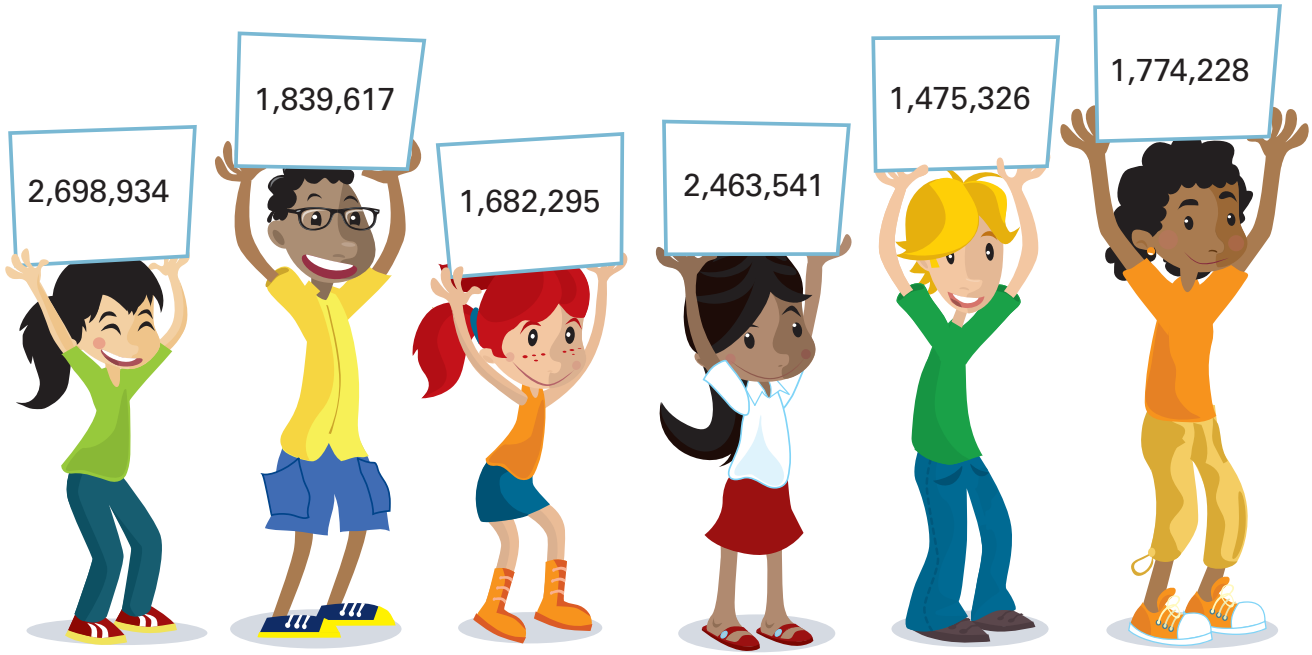


3 Number Patterns & Riddles

Who Am I?

READ the clues, and CIRCLE the mystery number.

HINT: Cross out any number that does not match the clues.



I am more than 1,500,000.

I am less than 2,500,000.

I have a 1 in the millions place.

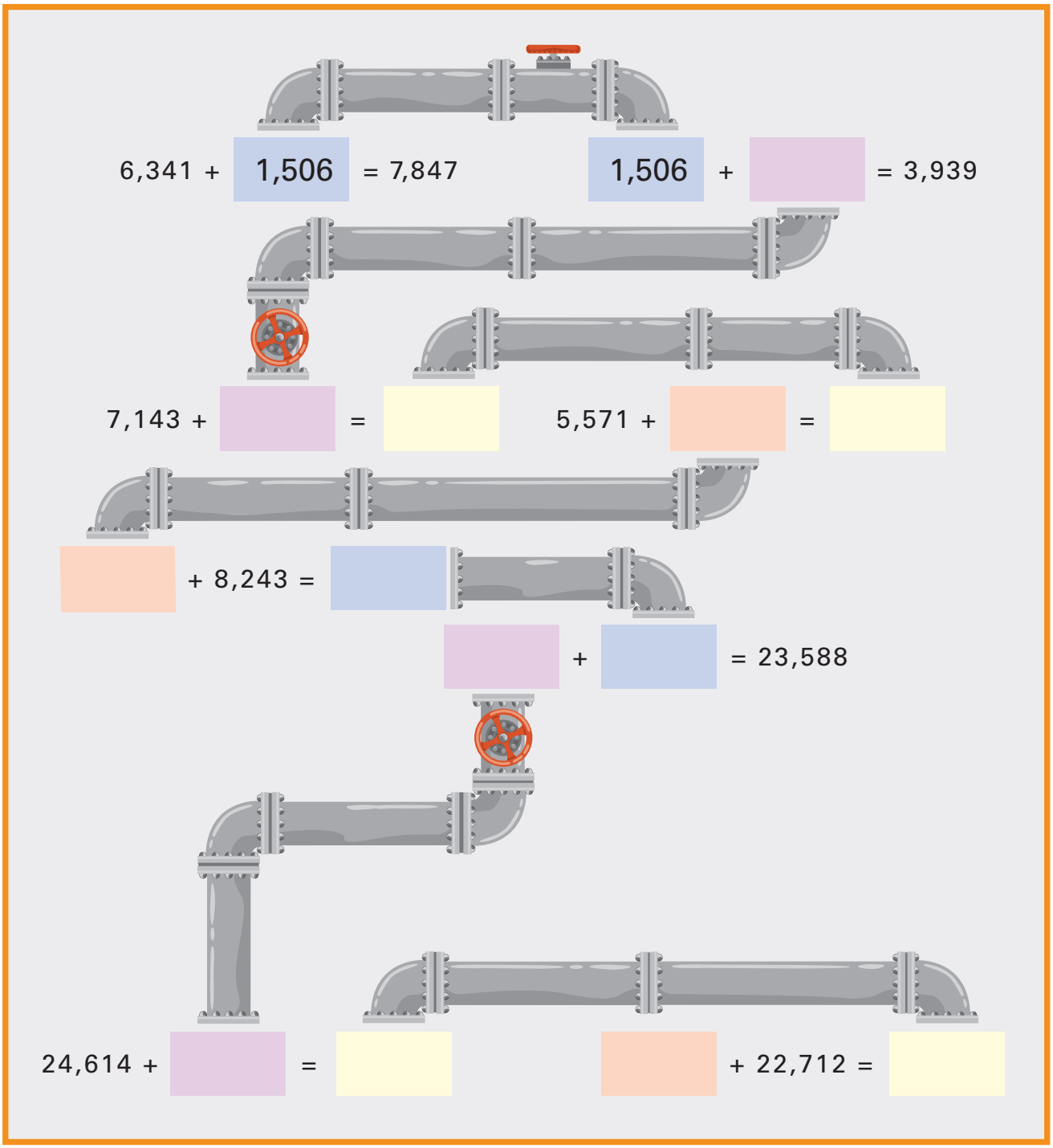
When rounded to the nearest hundred thousand, I'm 1,800,000.

When rounded to the nearest ten thousand, I'm 1,840,000.

Who am I?

Pipe Down

WRITE the missing number. Then FOLLOW the pipe, and WRITE the same number in the next problem.



4 Adding

Number Search

WRITE each sum. Then CIRCLE it in the puzzle.

HINT: Numbers are across and down only.

1. 48,350 + 28,627

2. 16,129 + 69,414

3. 39,524 + 11,825

4. 36,942 + 22,926

5. 85,924 + 13,834

6. 46,561 + 15,811

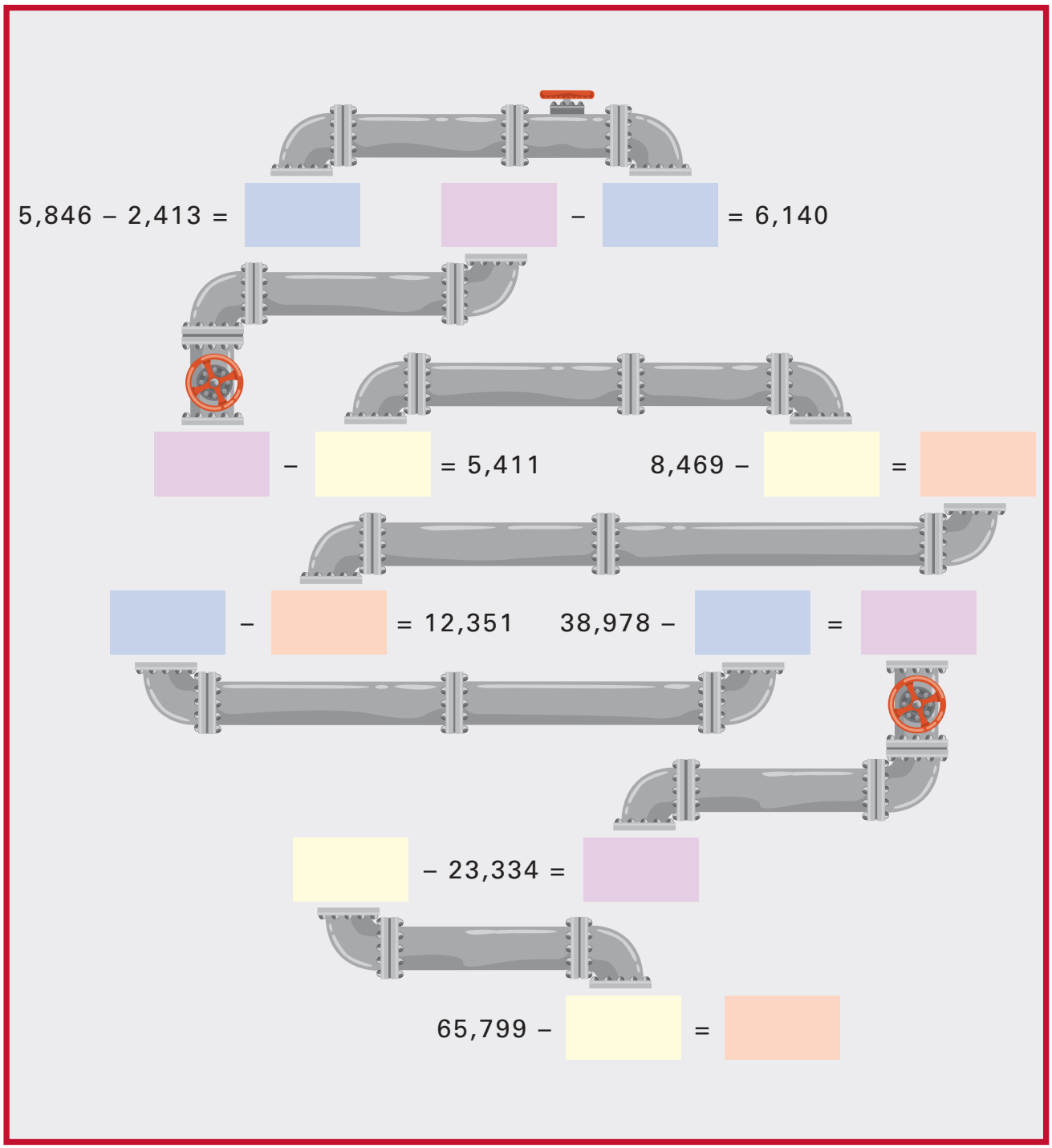
7. 21,842 + 18,861

8. 43,527 + 27,703

4	0	7	0	3	6	5	7
1	3	9	8	5	2	2	6
0	9	9	5	1	3	4	9
8	6	7	0	4	7	9	7
5	4	5	7	9	2	0	7
5	9	8	6	8	3	1	5
4	9	2	7	1	2	3	0
3	1	1	4	0	8	7	4

Pipe Down

WRITE the missing number. Then FOLLOW the pipe, and WRITE the same number in the next problem.



5 Subtracting

Number Search

WRITE each difference. Then CIRCLE it in the puzzle.

HINT: Numbers are across and down only.

1. 50,308 − 27,997

2. 94,690 − 18,477

3. 83,818 − 28,594

4. 90,620 − 19,602

5. 69,262 − 19,386

6. 54,532 − 36,296

7. 87,855 − 26,769

8. 45,199 − 10,227

1	8	2	3	6	9	6	1
7	6	2	4	6	0	1	7
1	1	0	2	3	5	0	1
3	5	5	2	2	4	8	0
4	2	2	3	5	9	6	1
9	0	4	1	6	8	1	8
7	6	2	1	3	7	6	2
2	9	8	8	3	6	7	2

Picking Pairs

ESTIMATE each sum or difference by rounding to the nearest ten thousand. DRAW a line to connect each problem with the correct estimate of the sum or difference.

30,000

32,199 + 29,486 =

11,375 + 8,268 =

40,000

58,659 – 23,926 =

10,000

81,292 – 65,653 =

19,410 + 12,342 =

60,000

92,084 – 37,241 =

50,000

20,000

6 Estimating Sums & Differences

Hidden Design

ESTIMATE each sum or difference by rounding each number to the nearest thousand. Then COLOR the squares that match the numbers to see the hidden design.

23,671 + 5,092 = 

68,349 – 42,688 = 

12,765 + 18,135 = 

50,913 – 16,320 = 

14,826 + 22,751 = 

40,559 – 13,429 =

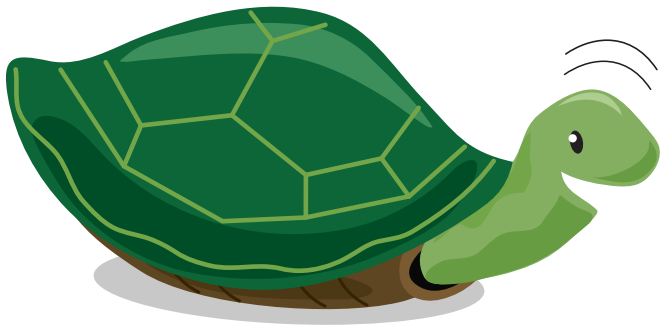
25,000	38,000	25,000	28,000	29,000	31,000	29,000	28,000
38,000	35,000	38,000	25,000	28,000	29,000	28,000	25,000
35,000	31,000	35,000	38,000	25,000	28,000	25,000	38,000
31,000	29,000	31,000	35,000	38,000	25,000	38,000	35,000
29,000	28,000	29,000	31,000	35,000	38,000	35,000	31,000
28,000	25,000	28,000	29,000	31,000	35,000	31,000	29,000
25,000	38,000	25,000	28,000	29,000	31,000	29,000	28,000
38,000	35,000	38,000	25,000	28,000	29,000	28,000	25,000

Code Breaker

SOLVE each problem. WRITE the letter that matches each product to solve the riddle.

6×5	8×2	9×4	5×5	3×8	10×6
1	2	3	4	5	6
M	R	W	U	V	H

7×1	9×8	6×8	2×9	9×5	10×4
7	8	9	10	11	12
Y	E	P	T	O	I



Where do you find a turtle with no legs?

36	60	72	16	72	24	72	16

7	45	25	48	25	18	60	40	30

.

7 Multiplication Facts

Gridlock

WRITE numbers so that the product of the rows and columns is correct.

HINT: Use only the numbers 1 through 10.

Example:

	3	5
4	12	20
8	24	40

3 × 4 = 12

3 × 8 = 24

5 × 4 = 20

5 × 8 = 40

	4	7
	8	14

	5	6
	15	18

	18	63
	20	70

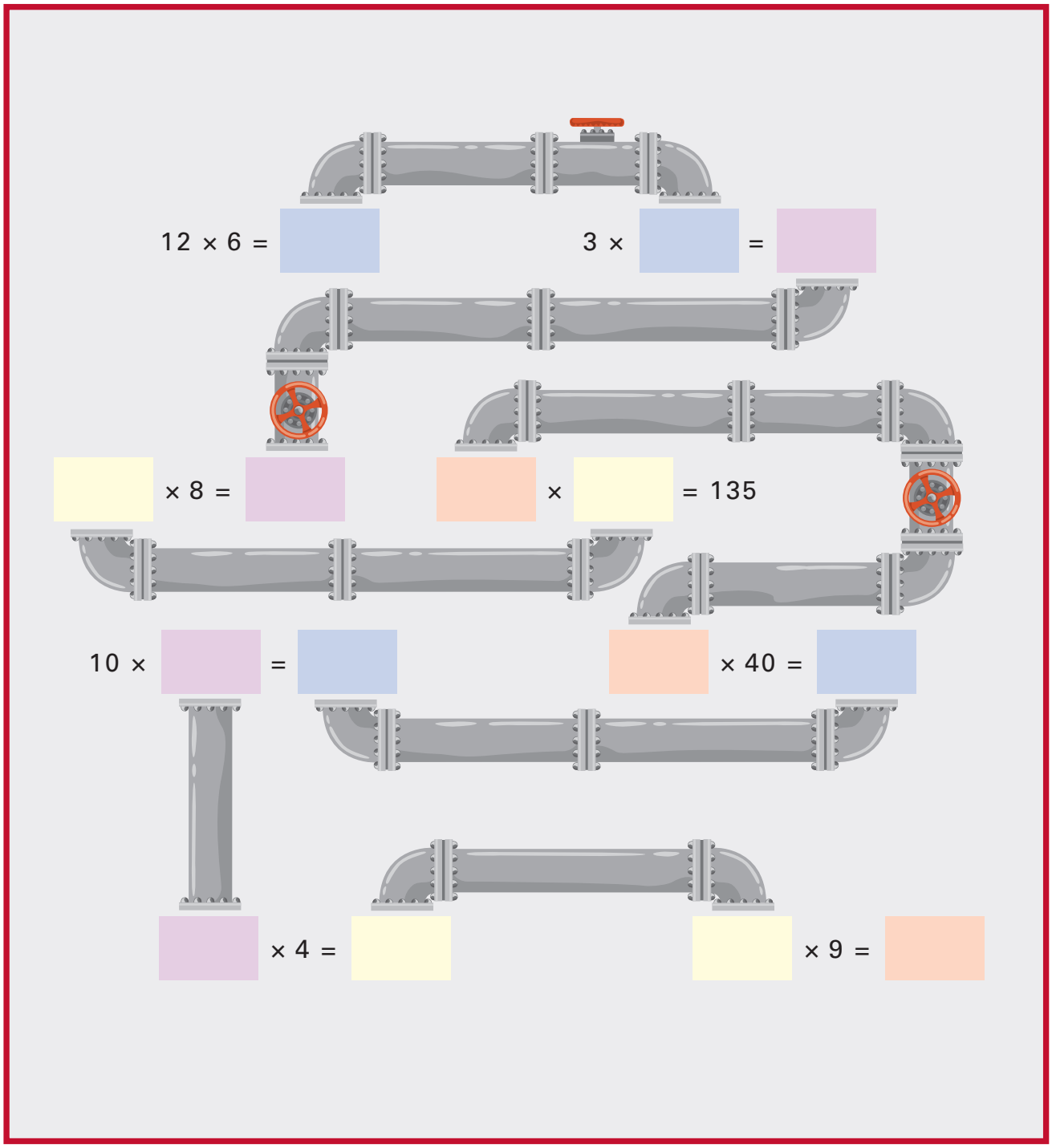
	10	16
	30	48

	21	56
	27	72

	35	42
	45	54

Pipe Down

WRITE the missing number. Then FOLLOW the pipe, and WRITE the same number in the next problem.



8 Super Square

WRITE numbers in the empty squares to finish all of the multiplication problems.

13	×	11	=	
×		×		×
6	×		=	
=		=		=
	×	154	=	

Code Breaker

SOLVE each problem. WRITE the letter that matches each quotient to solve the riddle.

Box	Problem	Letter
1	$63 \div 9$	C
2	$56 \div 7$	O
3	$30 \div 3$	H
4	$12 \div 12$	A
5	$16 \div 4$	T
6	$18 \div 9$	E
7	$45 \div 9$	G
8	$22 \div 2$	F
9	$24 \div 8$	U
10	$36 \div 3$	I
11	$30 \div 5$	L
12	$72 \div 8$	S

How did the frog make the baseball team?

___ ___
10 2

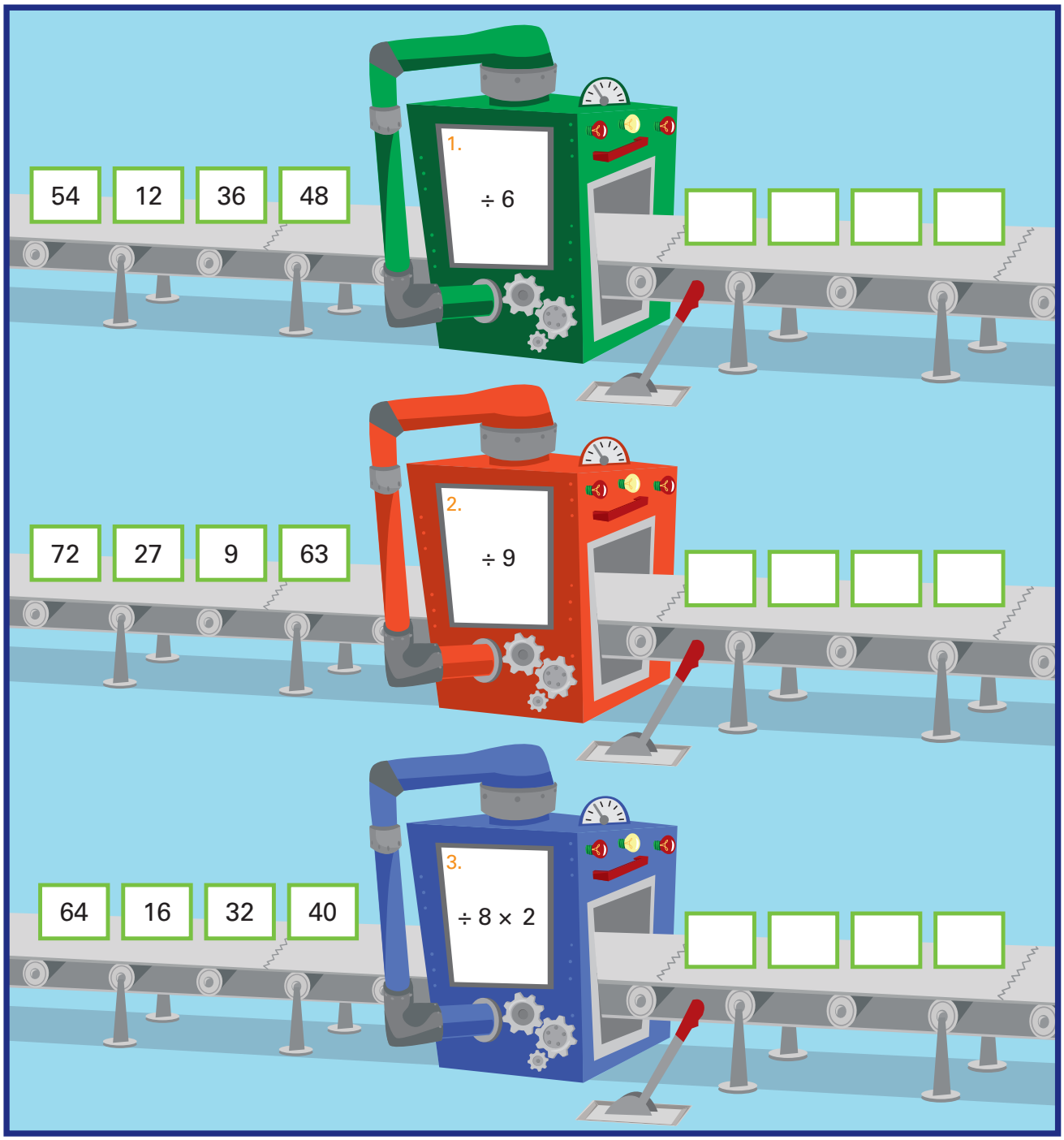
___ ___ ___ ___ ___ ___
7 1 3 5 10 4

___ ___ ___ ___
1 6 8 4

___ ___ ___ ___ ___ ___ ___.
8 11 11 6 12 2 9

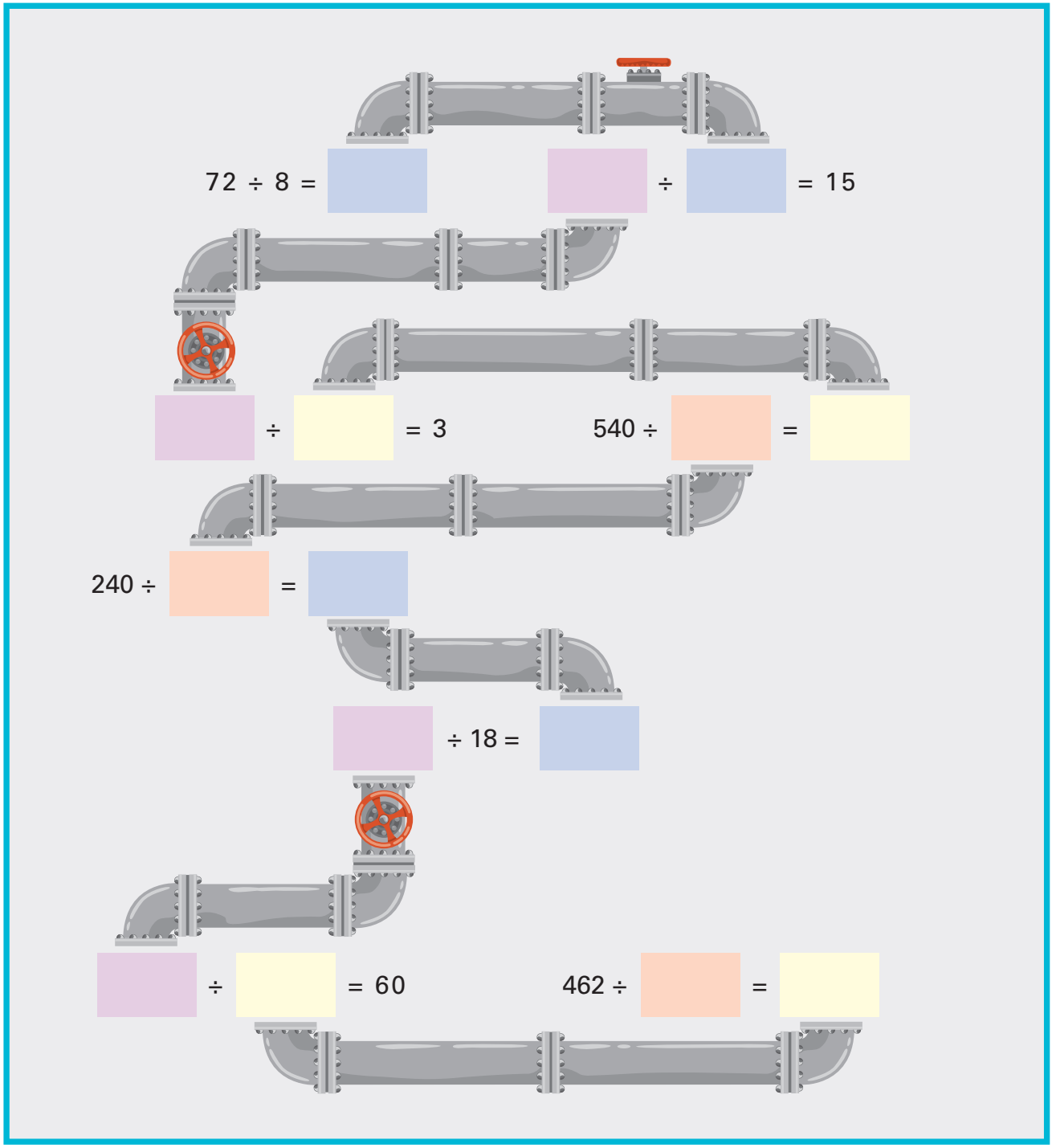
9 Number Factory

WRITE the numbers that will come out of each machine.



Pipe Down

WRITE the missing number. Then FOLLOW the pipe, and WRITE the same number in the next problem.



Super Square

WRITE numbers in the empty squares to finish all of the division problems.

972	÷	36	=	
÷		÷		÷
54	÷		=	
=		=		=
	÷	6	=	

What's the Password?

WRITE the letters that form a fraction of each word. Then WRITE the letters in order to find the secret password.

1. The first $\frac{1}{3}$ of **SURVEY** _____
2. The first $\frac{1}{7}$ of **MISSING** _____
3. The first $\frac{2}{9}$ of **MESMERIZE** _____
4. The last $\frac{1}{6}$ of **WINTER** _____
5. The first $\frac{3}{7}$ of **VACCINE** _____
6. The middle $\frac{1}{5}$ of **GRAVY** _____
7. The first $\frac{1}{2}$ of **TINY** _____
8. The last $\frac{2}{7}$ of **HEXAGON** _____

Password:

_____ _____ _____ _____ _____ _____

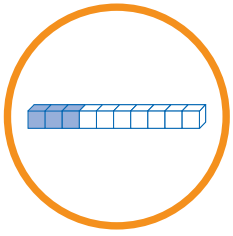
_____ _____ _____ _____ _____ _____ _____ _____

11 Recognizing Fractions & Decimals

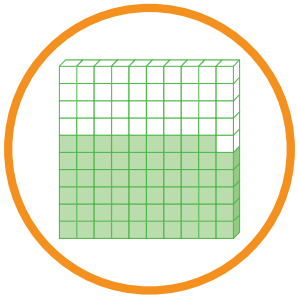
Picking Pairs

DRAW a line to connect each decimal with the correct picture.

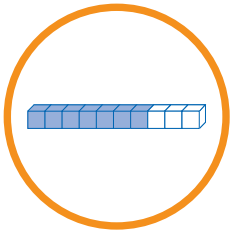
0.28



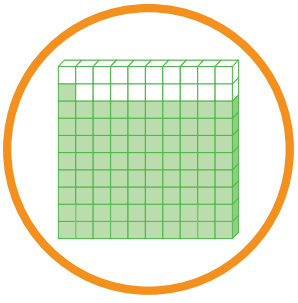
0.8



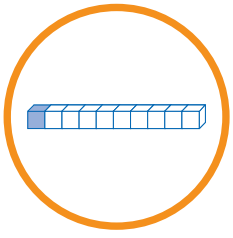
0.1

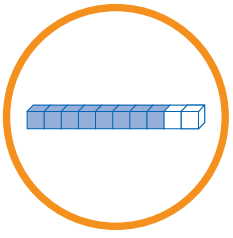


0.59



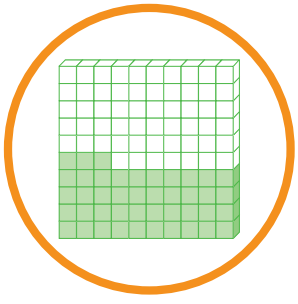
0.43



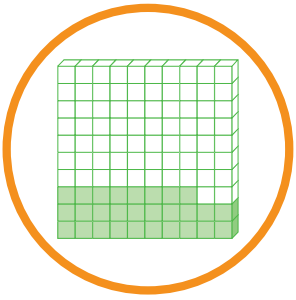


0.3

0.81



0.7



Code Breaker

SOLVE each problem. WRITE the letter that matches each sum to solve the riddle.

$\frac{1}{4} + \frac{2}{4} =$ [1] ___ H	$\frac{1}{6} + \frac{4}{6} =$ [2] ___ B	$\frac{2}{3} + \frac{1}{3} =$ [3] ___ T
$\frac{1}{9} + \frac{4}{9} =$ [4] ___ L	$\frac{3}{8} + \frac{4}{8} =$ [5] ___ E	$\frac{1}{5} + \frac{1}{5} =$ [6] ___ R
$\frac{1}{3} + \frac{1}{3} =$ [7] ___ A	$\frac{3}{7} + \frac{2}{7} =$ [8] ___ I	$\frac{2}{8} + \frac{3}{8} =$ [9] ___ Y

Which building has the most stories?

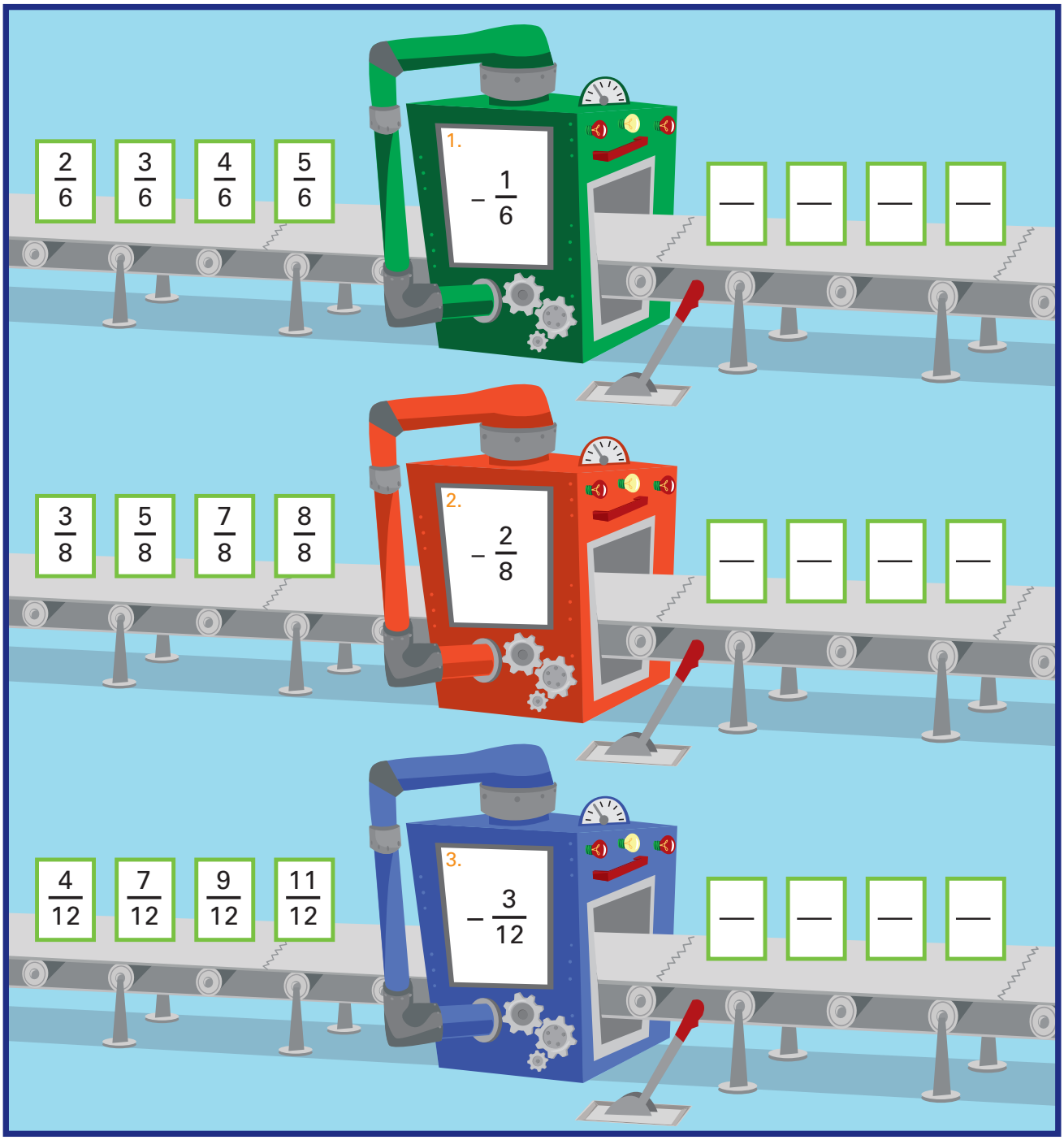
___ ___ ___
$\frac{3}{3}$ $\frac{3}{4}$ $\frac{7}{8}$

___ ___ ___ ___ ___ ___ ___.
$\frac{5}{9}$ $\frac{5}{7}$ $\frac{5}{6}$ $\frac{2}{5}$ $\frac{2}{3}$ $\frac{2}{5}$ $\frac{5}{8}$

12 Adding & Subtracting Fractions

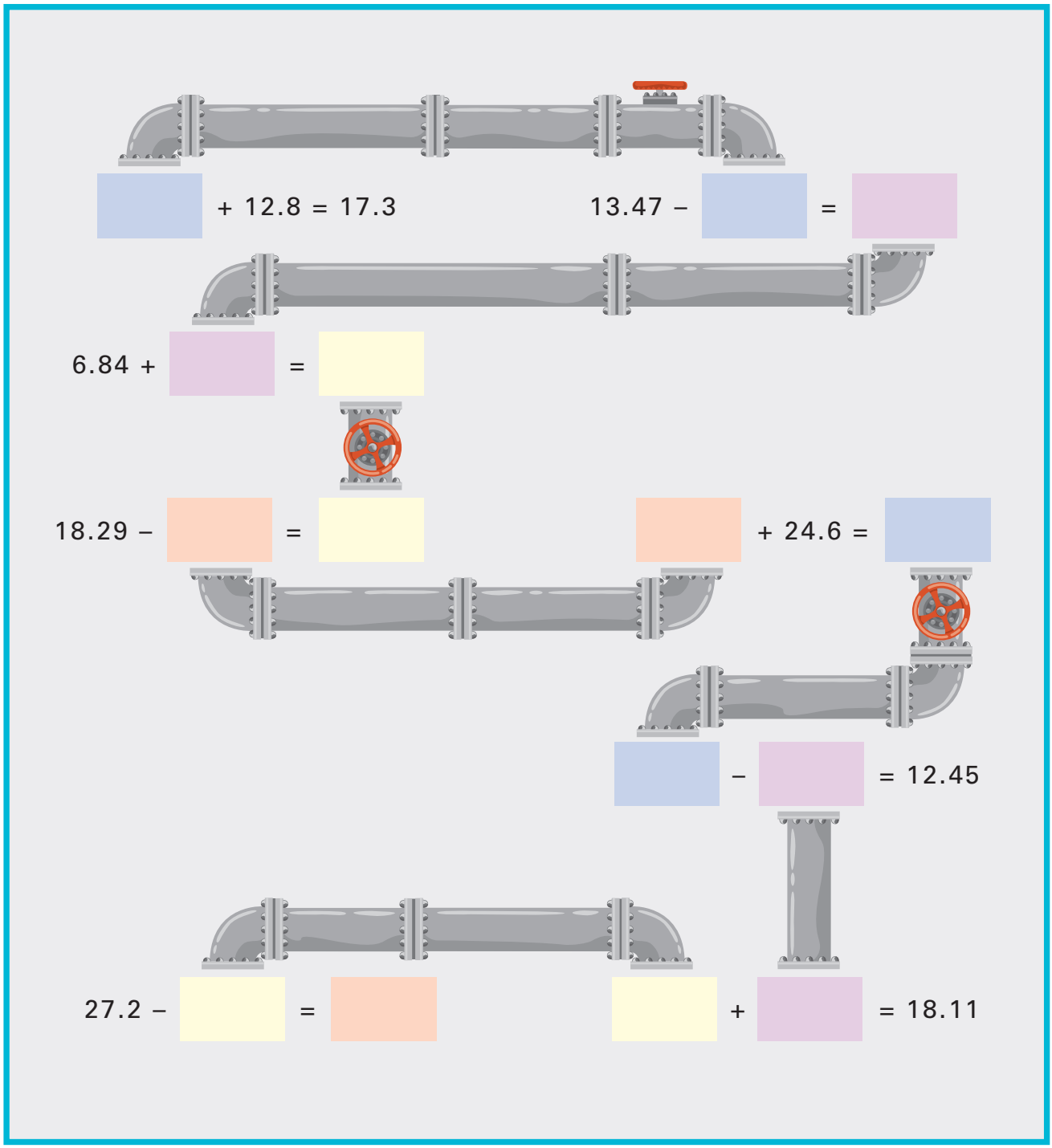
Number Factory

WRITE the fractions that will come out of each machine.



Pipe Down

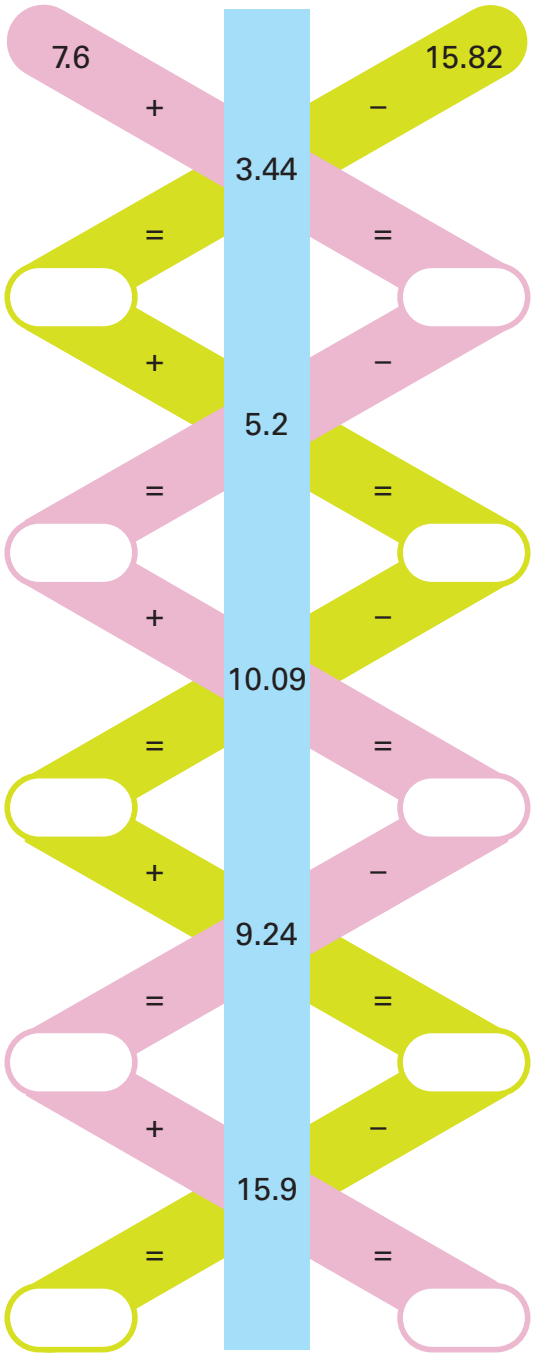
WRITE the missing number. Then FOLLOW the pipe, and WRITE the same number in the next problem.

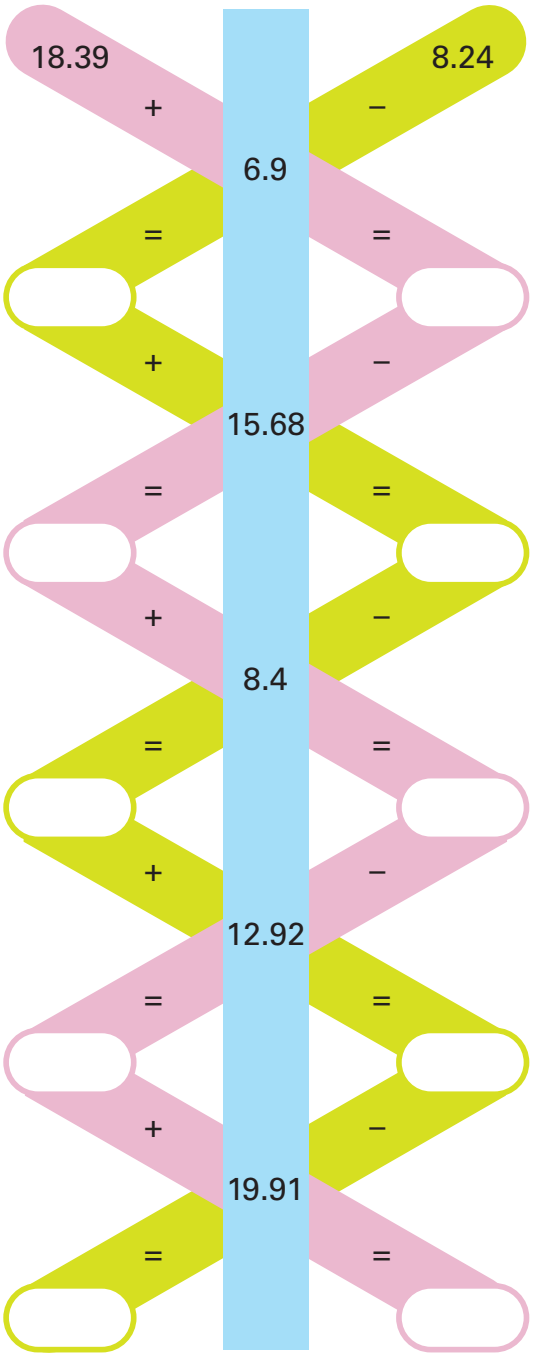


13 Adding & Subtracting Decimals

Crossing Paths

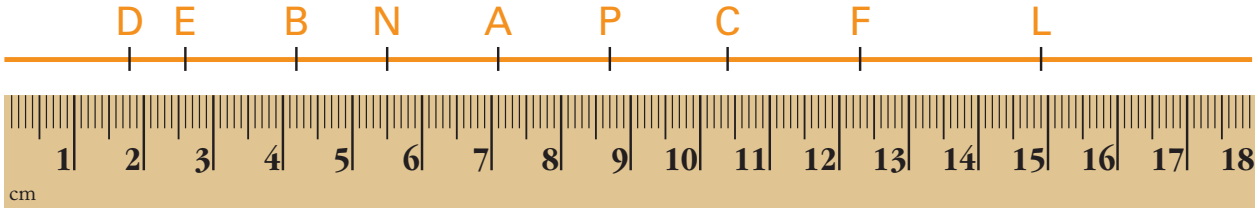
WRITE the missing numbers.





Code Ruler

WRITE the letter that matches each measurement to answer the riddle.



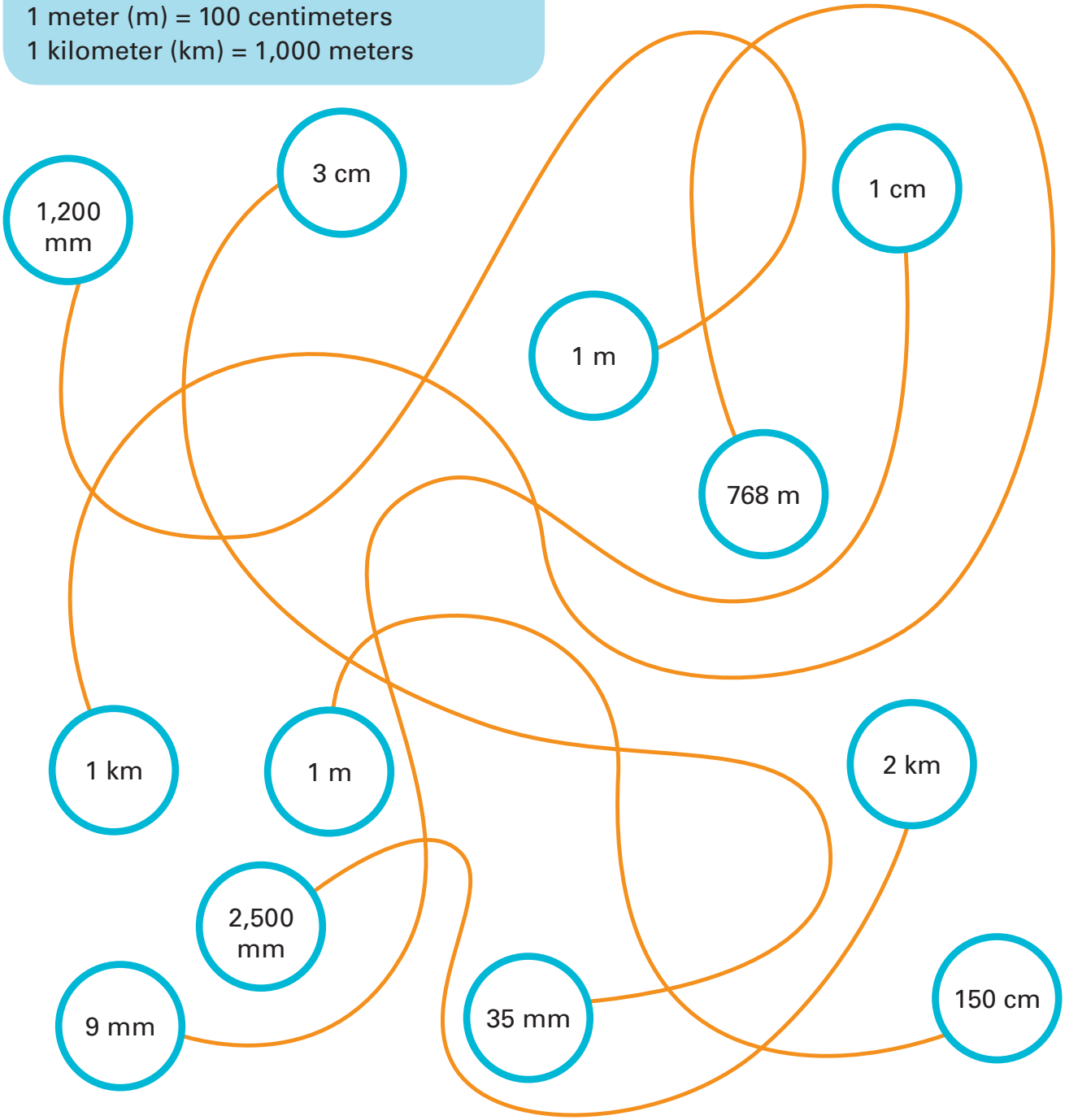
What runs around the yard without moving?

_____	_____	_____	_____	_____	_____ .
7.1 cm	12.3 cm	2.6 cm	5.5 cm	10.4 cm	2.6 cm

Totally Tangled

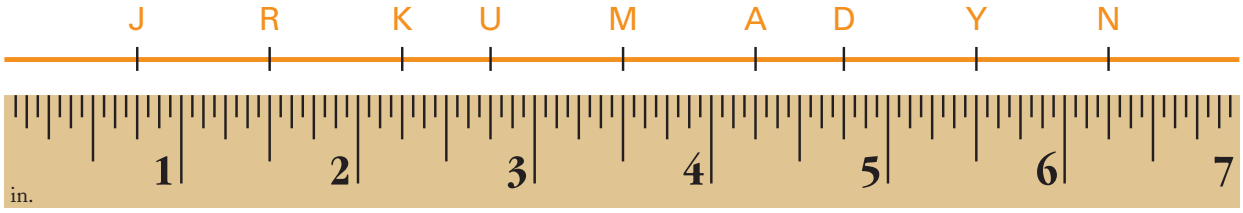
FIND the measurements that are connected. COLOR the smaller measurement in each pair.

1 centimeter (cm) = 10 millimeters (mm)
1 meter (m) = 100 centimeters
1 kilometer (km) = 1,000 meters



Code Ruler

WRITE the letter that matches each measurement to answer the riddle.



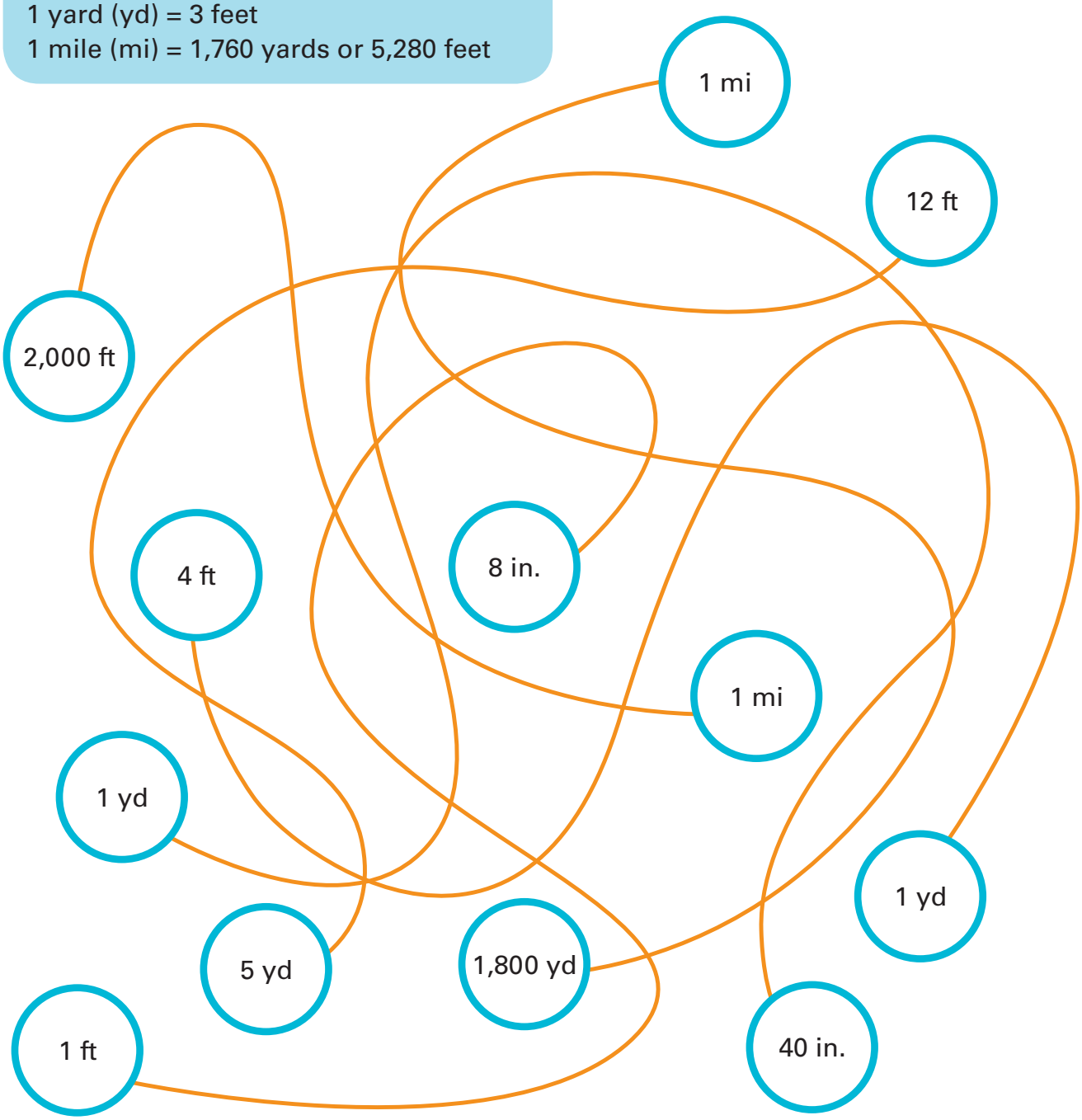
What do you call three feet of garbage?

$4\frac{1}{4}$ in.	$\frac{3}{4}$ in.	$2\frac{3}{4}$ in.	$6\frac{1}{4}$ in.	$2\frac{1}{4}$ in.	$5\frac{1}{2}$ in.	$4\frac{1}{4}$ in.	$1\frac{1}{2}$ in.	$4\frac{3}{4}$ in.

Totally Tangled

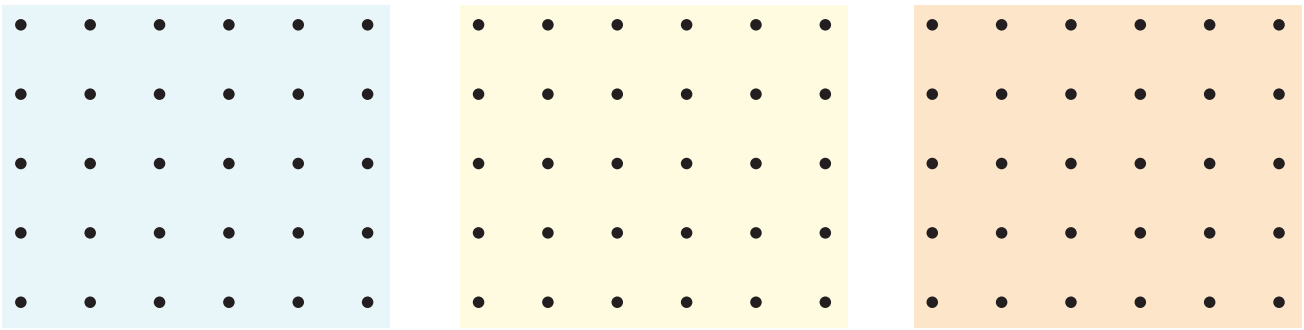
FIND the measurements that are connected. COLOR the larger measurement in each pair.

1 foot (ft) = 12 inches (in.)
1 yard (yd) = 3 feet
1 mile (mi) = 1,760 yards or 5,280 feet



Shape Creator

DRAW three different shapes that all have a perimeter of 12 units.

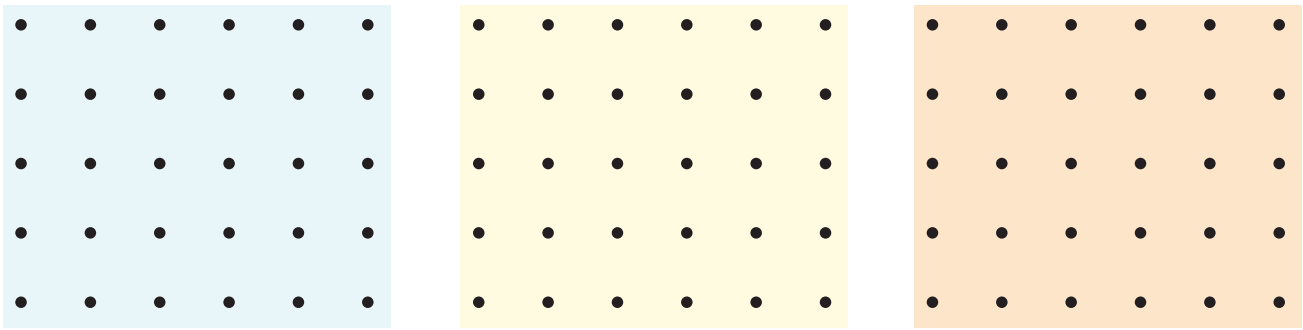


Using a centimeter ruler, DRAW two different shapes with a perimeter of 20 centimeters.

15

Shape Creator

DRAW three different shapes that all have an area of 10 square units.



Using a centimeter ruler, DRAW two different rectangles with an area of 24 square centimeters.

Code Breaker

SOLVE each problem. WRITE the letter that matches each equivalent measurement to solve the riddle.

1 gram (g) = 1,000 milligrams (mg) 1 kilogram (kg) = 1,000 grams

1	5 g = _____ mg	D	2	2,300 g = _____ kg	L
3	6 kg = _____ g	O	4	600 mg = _____ g	A
5	3,000 mg = _____ g	H	6	6.5 g = _____ mg	U
7	1.5 kg = _____ g	C	8	10,400 g = _____ kg	N
9	0.2 g = _____ mg	Y	10	1,000,000 mg = _____ kg	E

What can you add to a barrel to make it lighter?

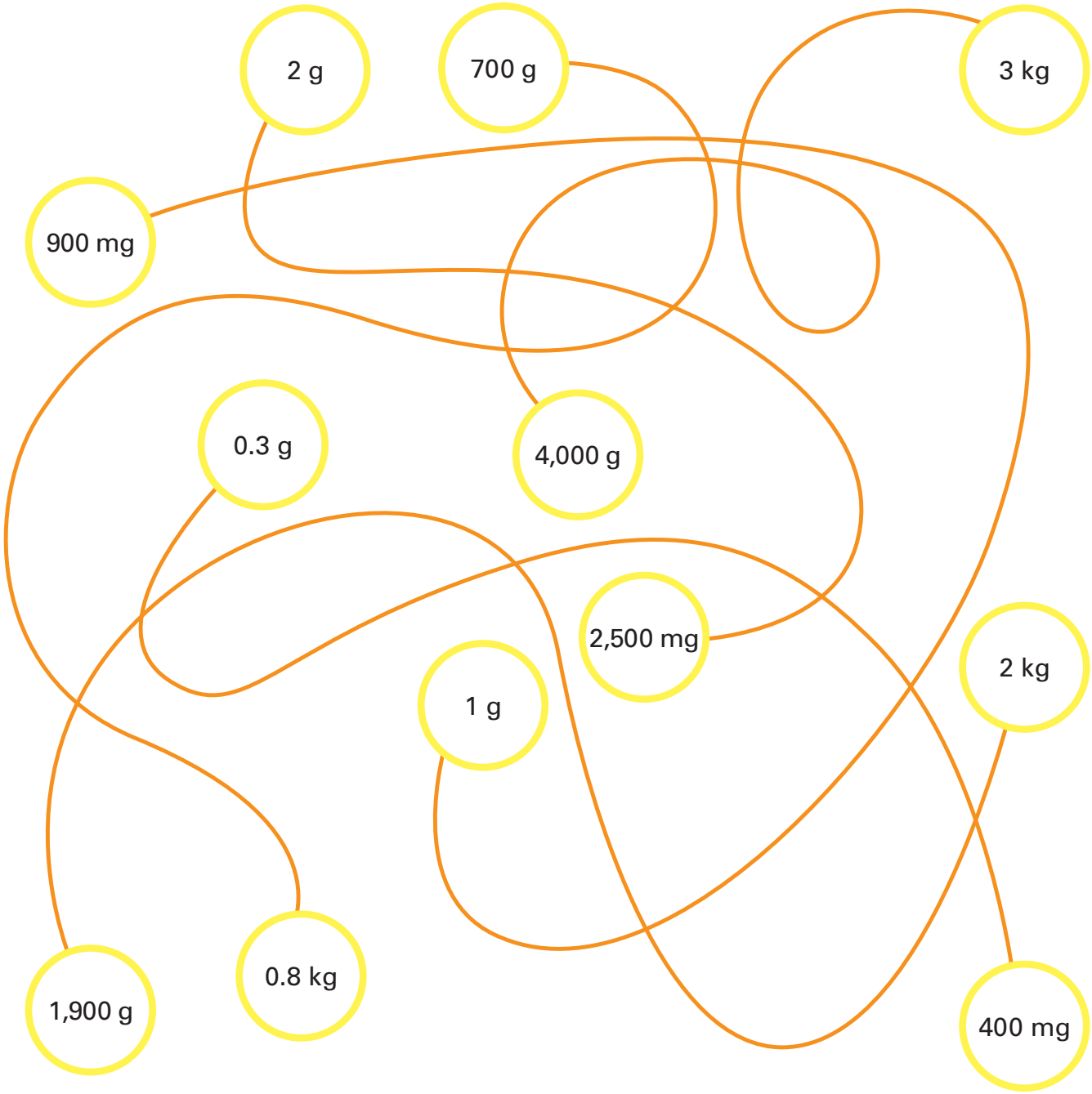
_____	_____	_____	_____	_____	_____	_____	_____	_____
200	6,000	6,500	1,500	0.6	10.4	0.6	5,000	5,000

_____	_____	_____	_____	_____	.
0.6	3	6,000	2.3	1	

16 Totally Tangled

FIND the measurements that are connected. COLOR the smaller measurement in each pair.

1 gram (g) = 1,000 milligrams (mg) 1 kilogram (kg) = 1,000 grams



Code Breaker

SOLVE each problem. Use a fraction where necessary. WRITE the letter that matches each equivalent measurement to solve the riddle.

1 pound (lb) = 16 ounces (oz) 1 ton (T) = 2,000 pounds

1 4,000 lb = _____ T	T	2 24 oz = _____ lb	I
3 2 lb = _____ oz	W	4 $\frac{1}{4}$ T = _____ lb	N
5 3 T = _____ lb	Y	6 5,000 lb = _____ T	B
7 32,000 oz = _____ T	O	8 $\frac{3}{4}$ lb = _____ oz	G
9 $\frac{1}{2}$ lb = _____ oz	H	10 $2\frac{3}{4}$ T = _____ lb	E

What weighs more, a ton of rocks or a ton of leaves?

_____	_____	_____	_____		_____	_____	_____	_____
2	8	5,500	6,000		$2\frac{1}{2}$	1	2	8

_____	_____	_____	_____	_____
32	5,500	$1\frac{1}{2}$	12	8

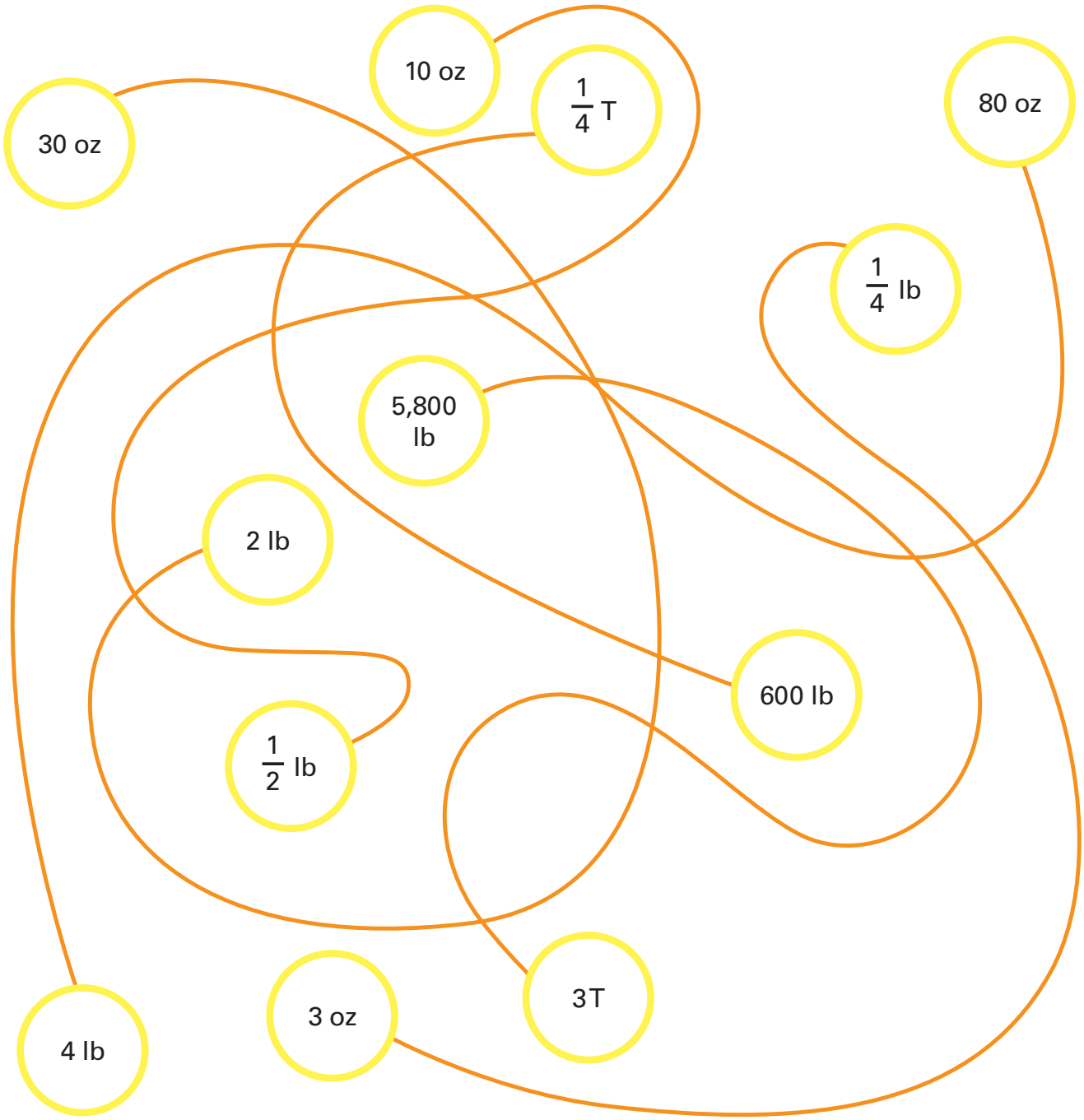
_____	_____	_____		_____	_____	_____ .
1	500	5,500		2	1	500

16 Weight

Totally Tangled

FIND the measurements that are connected. COLOR the larger measurement in each pair.

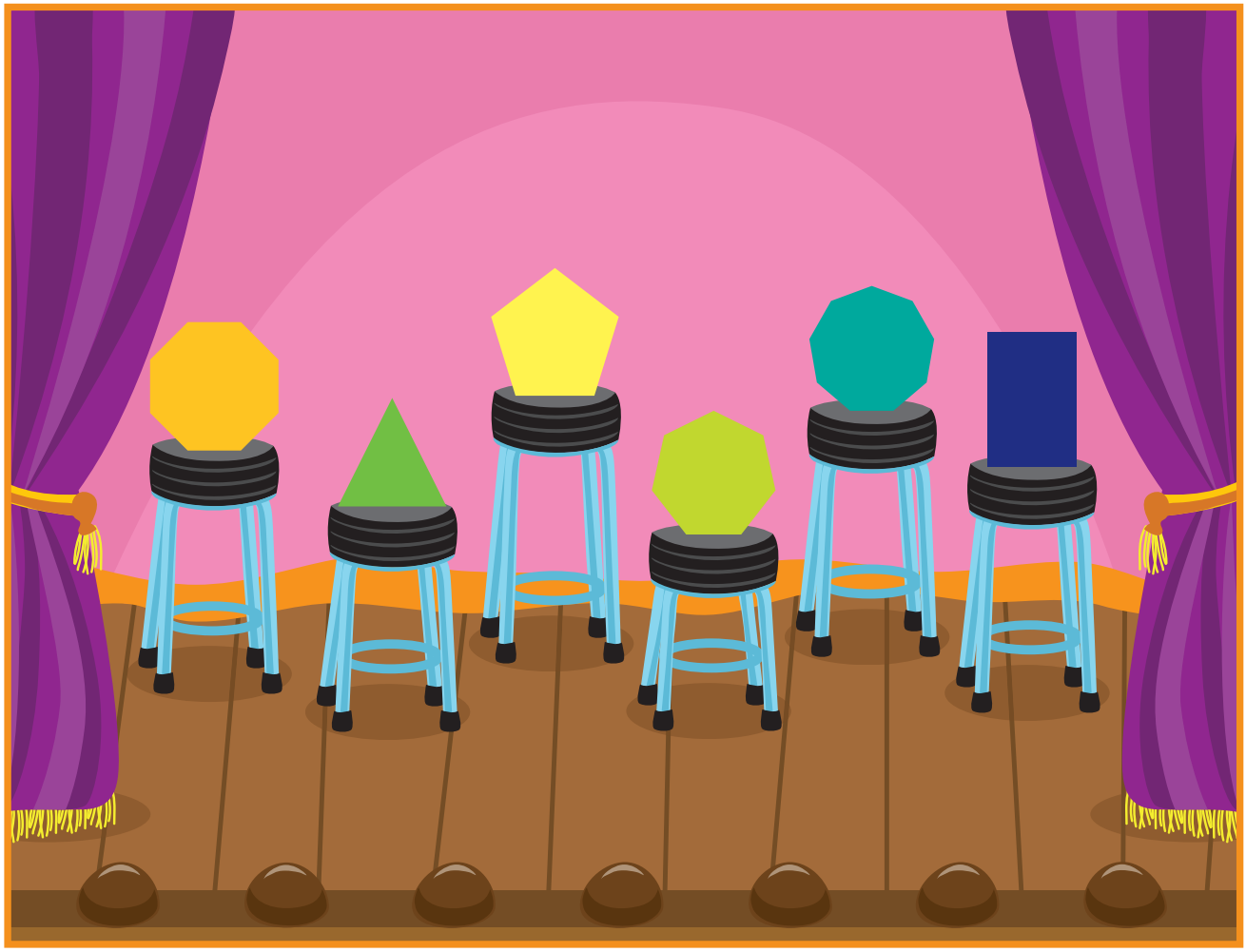
1 pound (lb) = 16 ounces (oz) 1 ton (T) = 2,000 pounds



Who Am I?

READ the clues, and CIRCLE the mystery shape.

HINT: Cross out any shape that does not match the clues.



I have fewer than nine sides.

I have no acute angles.

I have more than five sides.

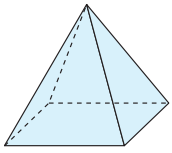
I have seven vertices.

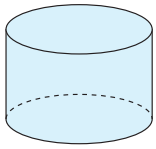
Who am I?

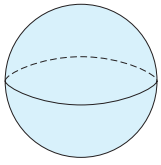
Criss Cross

IDENTIFY each shape, and WRITE the shape names in the puzzle.

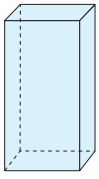
ACROSS

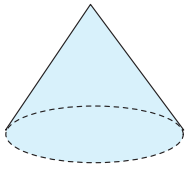
3. 

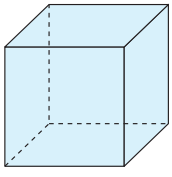
4. 

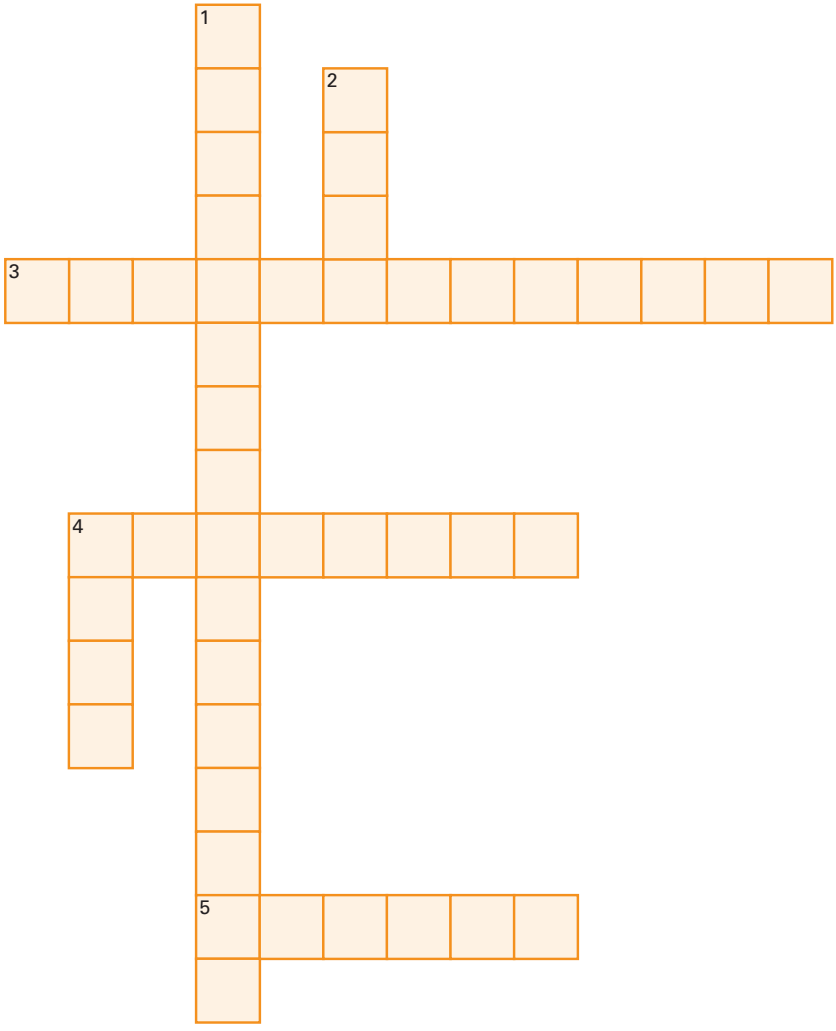
5. 

DOWN

1. 

2. 

4. 



T-Shirt Shop

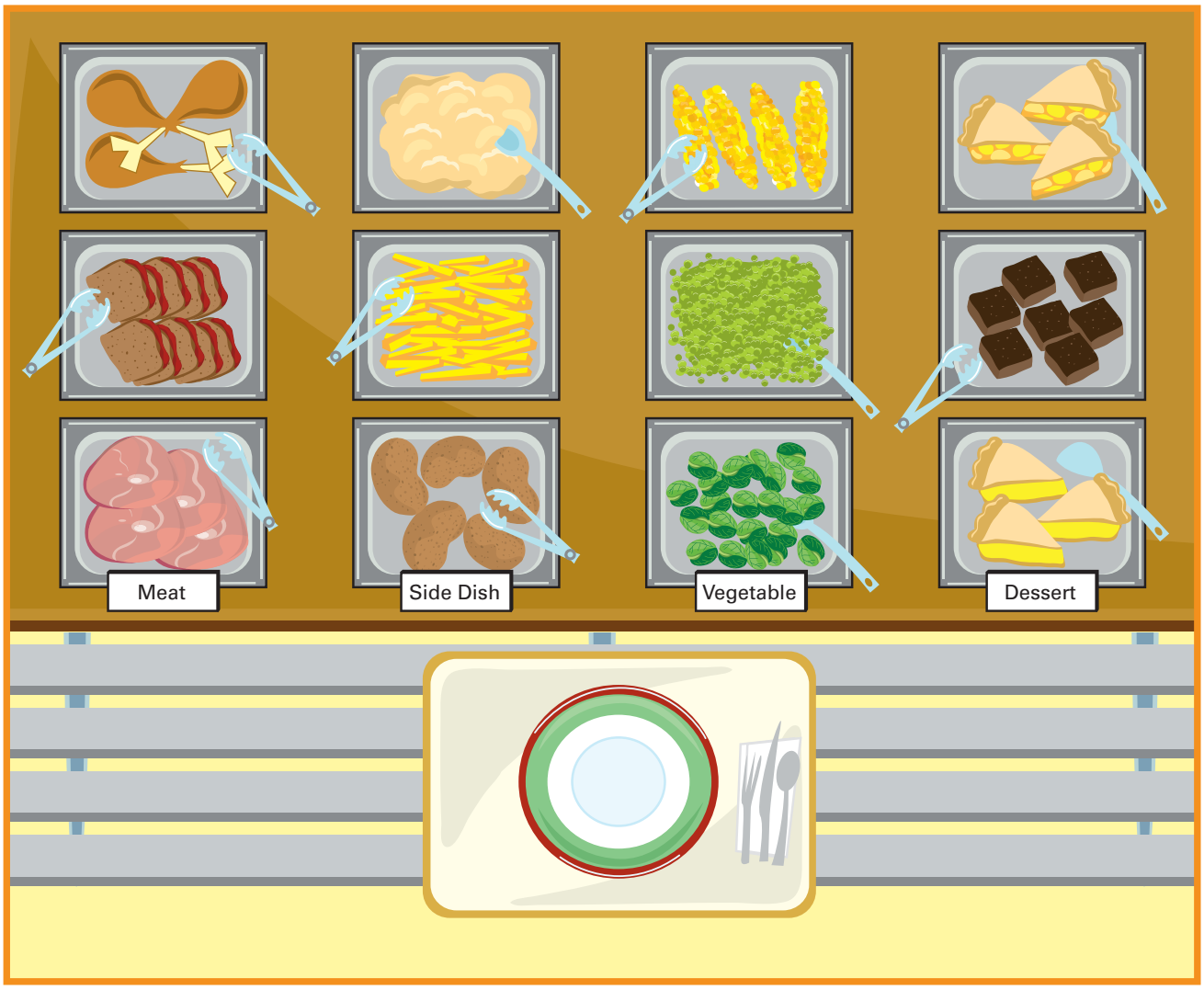
READ the paragraph, and WRITE the answer.

A T-shirt shop can put any design on the T-shirt of your choice. There are 6 different T-shirts and 12 different designs, and you can choose to have your name put on the back or not. How many different T-shirts can you make?

_____ T-shirts

All You Can Eat

READ the paragraph, and WRITE the answer.



Each time you go to the buffet, your plate should have a choice of one meat, one side dish, one vegetable, and one dessert. How many times can you visit the buffet and get a different plate of food?

_____ times

Bus Ride

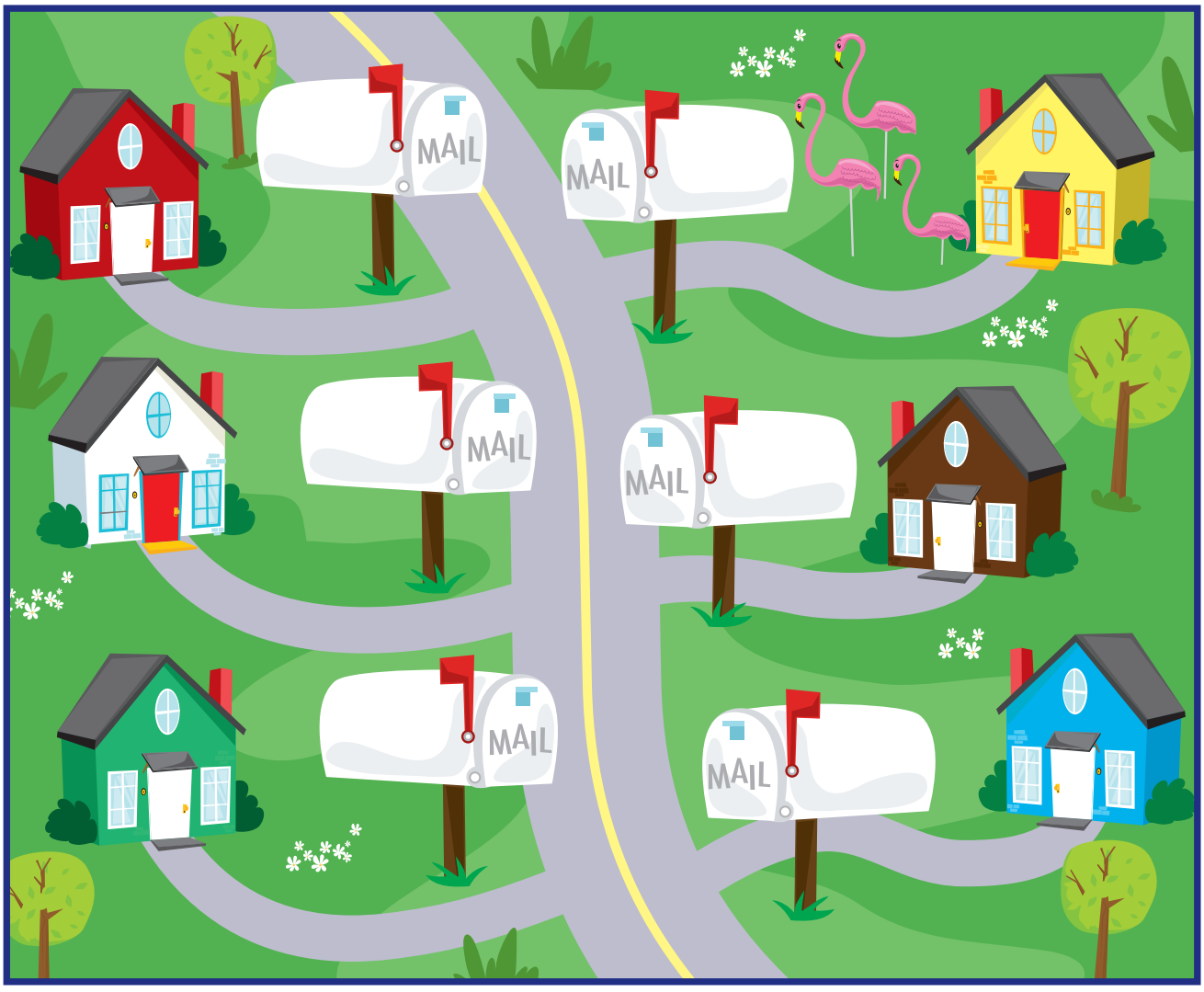
READ the clues, and CIRCLE the answer.

The Gallagher sisters always sit together.
Andrew sits next to Alyssa and behind Bill.
Stella likes to sit in back.
Bill always takes the window seat next to Nolan.
Kayley sits in front of Becky.
Dan sits in the aisle seat next to Ella.

Where is Dan in this picture?

In the Neighborhood

WRITE the name of each family on the correct mailbox.



The Green family chose their house for its color.

The Park family is always complaining about the noise coming from the Taguchi house next door.

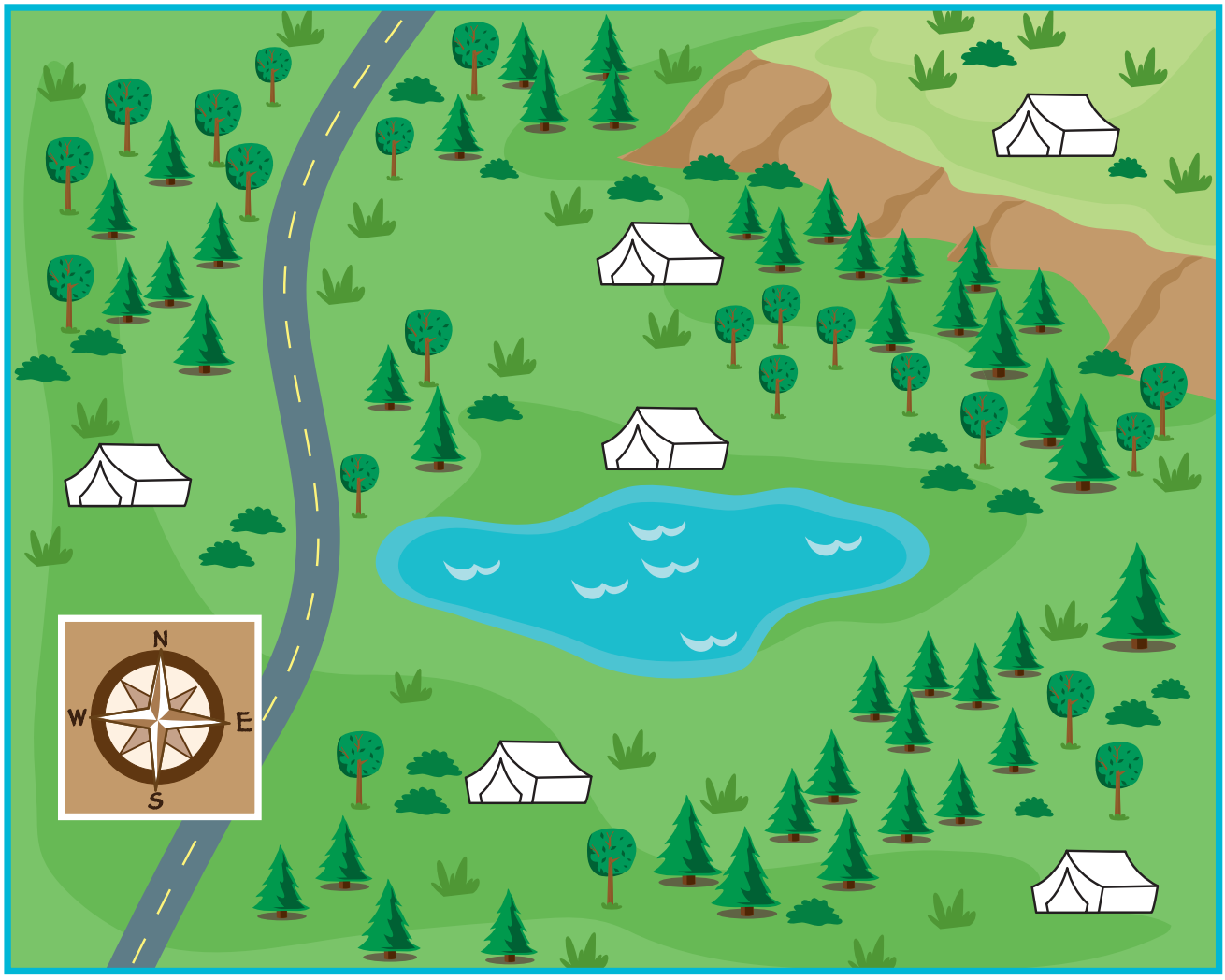
The Simpsons live across the street from the Green family.

The Taguchis don't like looking out their front window at the Links' lawn flamingoes.

The Meyers live between the Links and the Simpsons.

Colorful Campground

Each tent is a different color. READ the clues, and COLOR each tent red, blue, yellow, green, orange, or purple.



The blue tent is west of the road.

The orange tent is below the lake.

The purple tent is north of the green tent.

The tent farthest south is not orange or purple.

The tent closest to the lake is green.

The red tent has a view of the entire campground.

Distant Places

DRAW lines between the four pairs of towns that have a 20-mile stretch of road between them.

HINT: Use the map key to help you.

Flip a Coin

Probability is used to describe the chance of something happening. It can be represented by a number from 0 to 1.

Example: The probability that you will grow to be 30 feet tall is 0.

The probability that the sun will rise tomorrow morning is 1.

The probability of getting heads on a coin flip is $\frac{1}{2}$.

To see how probability works, try playing this game. FLIP a coin three times, and WRITE whether you flip heads or tails. SCORE 20 points for turns where you flip either three heads or three tails. SCORE 8 points for turns where you flip heads, heads, tails or tails, tails, heads. SCORE 5 points for any other coin combination. REPEAT this three more times. Then ANSWER the questions.

1	2	3	Score

1	2	3	Score

1	2	3	Score

1	2	3	Score

Total Score: _____

1. What is the chance of scoring 80 points in this game?
   impossible unlikely likely certain
2. What is the chance of scoring 15 points in this game?
   impossible unlikely likely certain
3. What is the chance of scoring at least 20 points in this game?
   impossible unlikely likely certain

21 Holding Hands

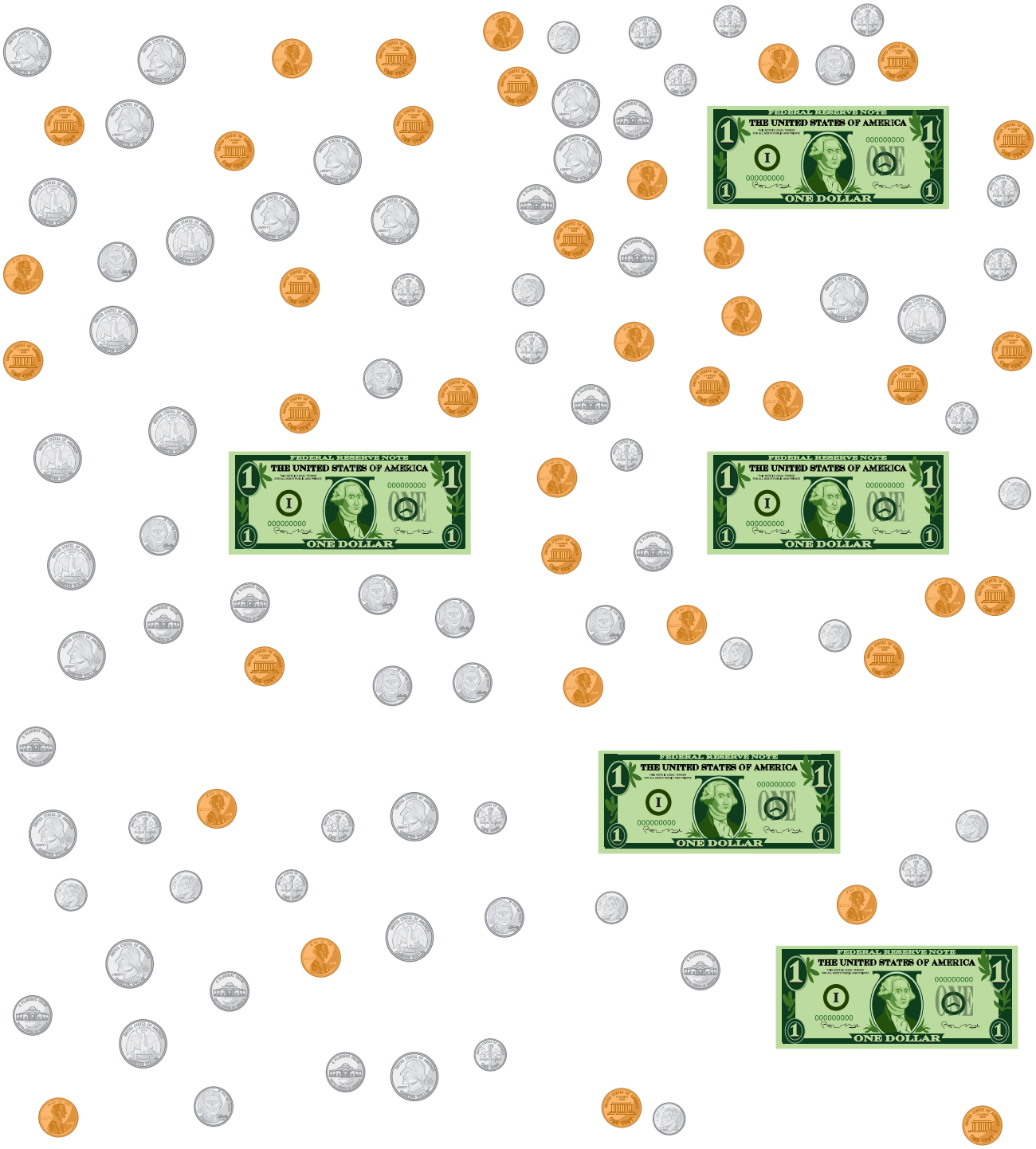
In one day, how many times do the hour and minute hands cross each other on a clock? WRITE the answer.

HINT: After 12:00, the first time that the clock hands cross each other is around 1:06. Think about what times the clock hands cross, and draw them on the clock to help you count. Try using a watch if you get stuck.

_____ times

Pocket Change

DRAW three straight lines to create six different money sets of equal value.



What's in My Hand?

READ the clues, and WRITE how many of each coin and bill are hidden in the hand.

I'm holding six paper bills and nine coins.

The money in my hand totals $48.89.

My coins total less than one dollar.

I don't have any 10-dollar bills.

What's in my hand?

1. _____ 

2. _____ 

3. _____ 

4. _____ 

5. _____ 

6. _____ 

7. _____ 

8. _____