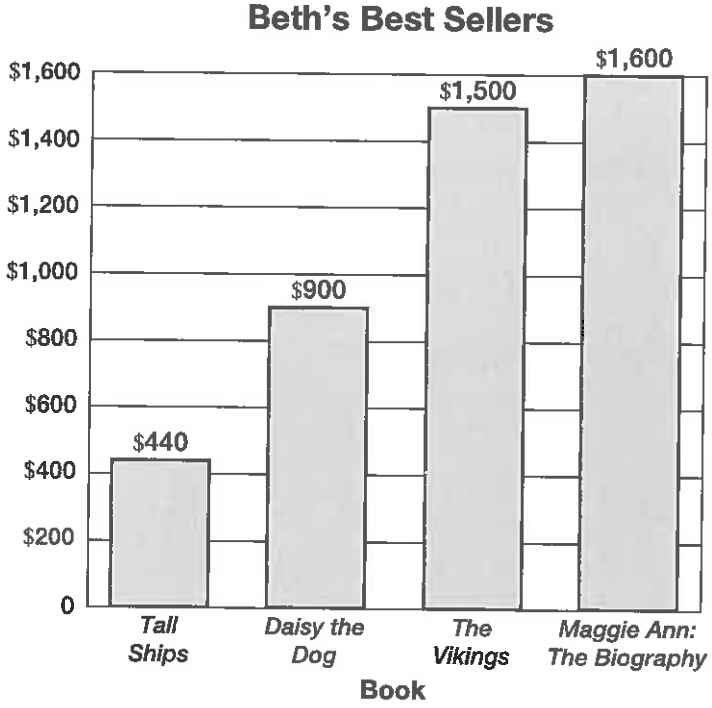
Name _____

Enrichment
5-1

Beth's Best Sellers

The graph below shows the titles of the four best-selling books at Beth's Book Store. Divide mentally to answer each question.



1. Beth charged $8 for each copy of *Maggie Ann: The Biography*. How many total copies did Beth sell? _____

2. Beth charged $5 for each copy of *The Vikings*. How many total copies did Beth sell? _____

3. Beth charged $9 for each copy of *Daisy the Dog*. How many total copies did Beth sell? _____

4. Beth began charging $5 for each copy of *Tall Ships*. She then lowered the price to $4 a copy. How many total copies might Beth have sold? Circle the most reasonable amount listed below.

   70 80 90

5. Which book did Beth sell the most copies of?

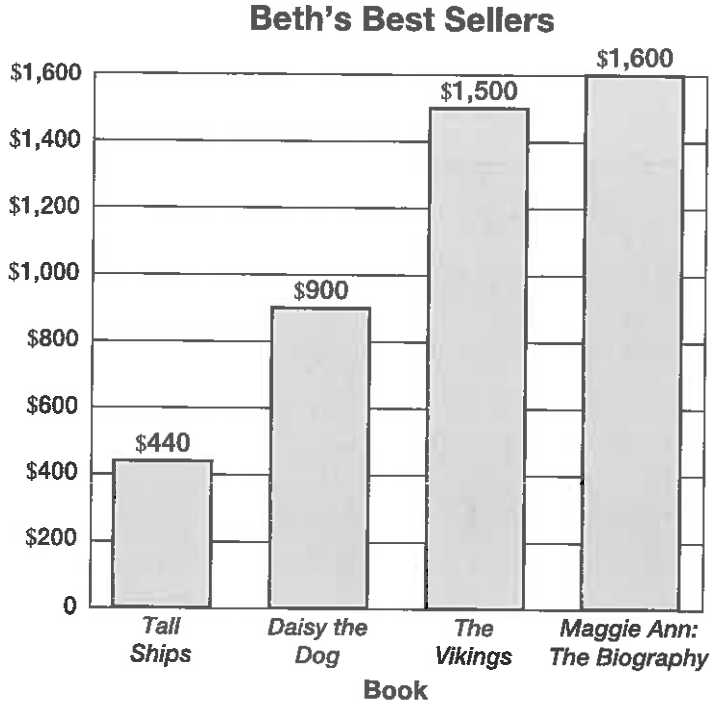
   _____

Name _____

Enrichment
5-1

Beth's Best Sellers

The graph below shows the titles of the four best-selling books at Beth's Book Store. Divide mentally to answer each question.



1. Beth charged $8 for each copy of *Maggie Ann: The Biography*. How many total copies did Beth sell? **200 copies**

2. Beth charged $5 for each copy of *The Vikings*. How many total copies did Beth sell? **300 copies**

3. Beth charged $9 for each copy of *Daisy the Dog*. How many total copies did Beth sell? **100 copies**

4. Beth began charging $5 for each copy of *Tall Ships*. She then lowered the price to $4 a copy. How many total copies might Beth have sold? Circle the most reasonable amount listed below.

   70 80 (90)

5. Which book did Beth sell the most copies of?

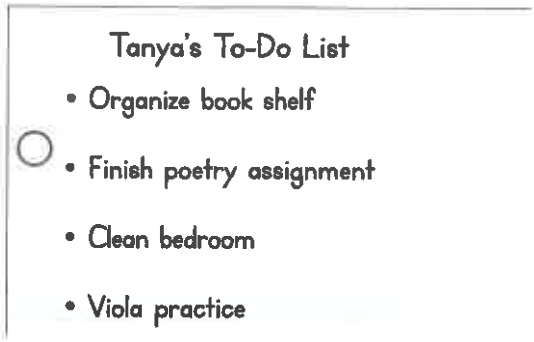
   The Vikings

Name _____

Enrichment
5-2

Tanya's To-Do List

Tanya wants to get a lot done this weekend.
She made a list of things she needs to do.



1. Tanya wants to place 209 books on her bookcase. The bookcase has 4 shelves. About how many books will she place on each shelf?

_____

2. Tanya has to write a poem with 175 words. She plans to spend 2 hours writing. About how many words should she write each hour to finish the poem?

_____

3. Tanya wants to spend an equal amount of time cleaning her closet, her drawers, and under her bed. If she has put aside 95 minutes to do this, about how much time can she spend on each area?

_____

4. Tanya's goal is to practice her viola for 139 minutes over 2 days. About how many minutes will she practice each day?

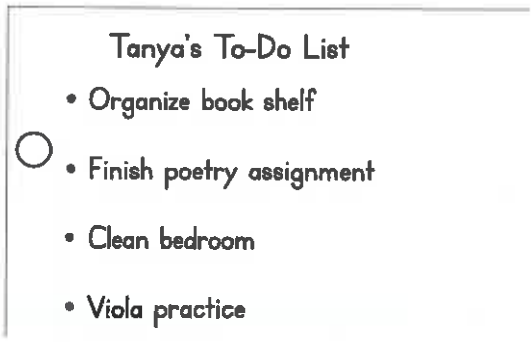
_____

Name _____

Enrichment
5-2

Tanya's To-Do List

Tanya wants to get a lot done this weekend.
She made a list of things she needs to do.



1. Tanya wants to place 209 books on her bookcase. The bookcase has 4 shelves. About how many books will she place on each shelf?

About 50 books

2. Tanya has to write a poem with 175 words. She plans to spend 2 hours writing. About how many words should she write each hour to finish the poem?

About 90 words

3. Tanya wants to spend an equal amount of time cleaning her closet, her drawers, and under her bed. If she has put aside 95 minutes to do this, about how much time can she spend on each area?

About 30 minutes

4. Tanya's goal is to practice her viola for 139 minutes over 2 days. About how many minutes will she practice each day?

About 70 minutes

Name _____

Enrichment
5-3

Estimating Bracelets

Carla and Marla are making bracelets to sell at a craft fair. Each bracelet uses 5 blue beads, 8 silver beads, 2 gold beads, and 6 opal beads. The table shows how many beads they have of each color.

- Use estimation to figure out about how many bracelets Carla and Marla can make with each color of bead.
- Then tell if each answer is an **overestimate** and they will not have quite enough beads, or an **underestimate** and they will have some beads left over.

Color	Number of Beads	Number Needed for Each Bracelet	About How Many Bracelets They Can Make	Is the Estimate Over or Under?
Blue	225	5		
Silver	422	8		
Gold	55	2		
Opal	225	6		

1. About how many bracelets can they make before they run out of beads?

_____

2. What color will they run out of first?

_____

3. Will they run out of blue beads or opal beads first? How do you know?

_____

_____

_____

_____

Name _____

Enrichment
5-3

Estimating Bracelets

Carla and Marla are making bracelets to sell at a craft fair. Each bracelet uses 5 blue beads, 8 silver beads, 2 gold beads, and 6 opal beads. The table shows how many beads they have of each color.

- Use estimation to figure out about how many bracelets Carla and Marla can make with each color of bead.
- Then tell if each answer is an **overestimate** and they will not have quite enough beads, or an **underestimate** and they will have some beads left over.

Color	Number of Beads	Number Needed for Each Bracelet	About How Many Bracelets They Can Make	Is the Estimate Over or Under?
Blue	225	5	40	Under
Silver	422	8	50	Under
Gold	55	2	30	Over
Opal	225	6	40	Over

1. About how many bracelets can they make before they run out of beads?

   About 30 bracelets

2. What color will they run out of first?

   Gold

3. Will they run out of blue beads or opal beads first? How do you know? Opal; Sample answer: 40 bracelets is an underestimate for the blue beads. 40 bracelets will take 5×40 or 200 beads. They have 225 blue beads, so they will have some left over. 40 beads is an overestimate for the opal beads. 40 bracelets will take 6×40 or 240 beads. They only have 225 beads, so they will run out before they complete 40 bracelets.

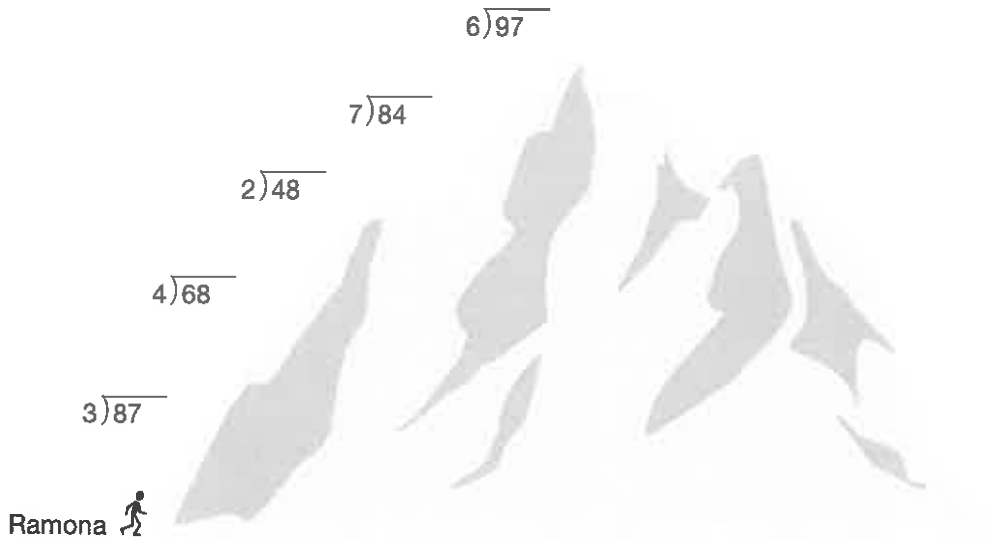
Name _____

Enrichment
5-4

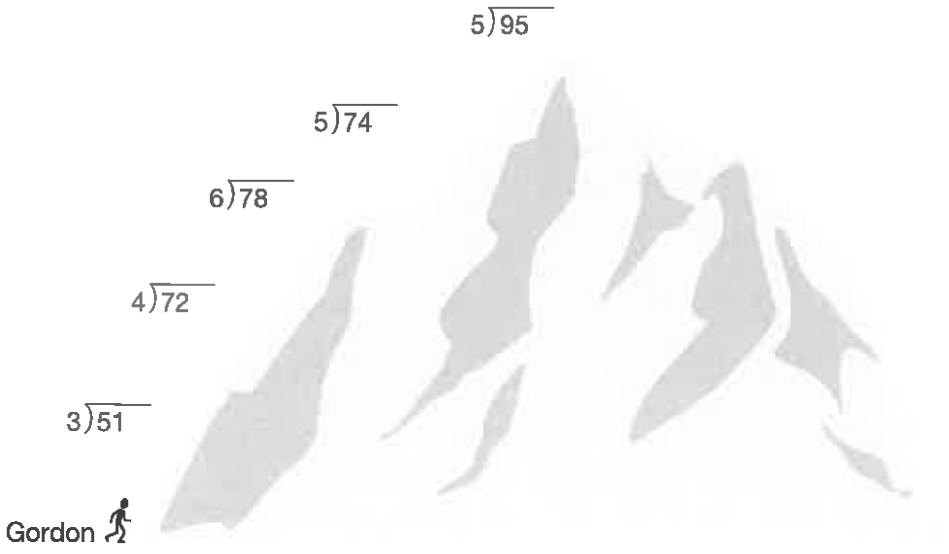
Will They Reach the Top?

Begin at the bottom of each mountain and solve each division problem. If there is a remainder, the hiker stops at that problem. If there is no remainder, the hiker keeps climbing.

1.



2.



3. Which hiker made it farther up the mountain?

_____

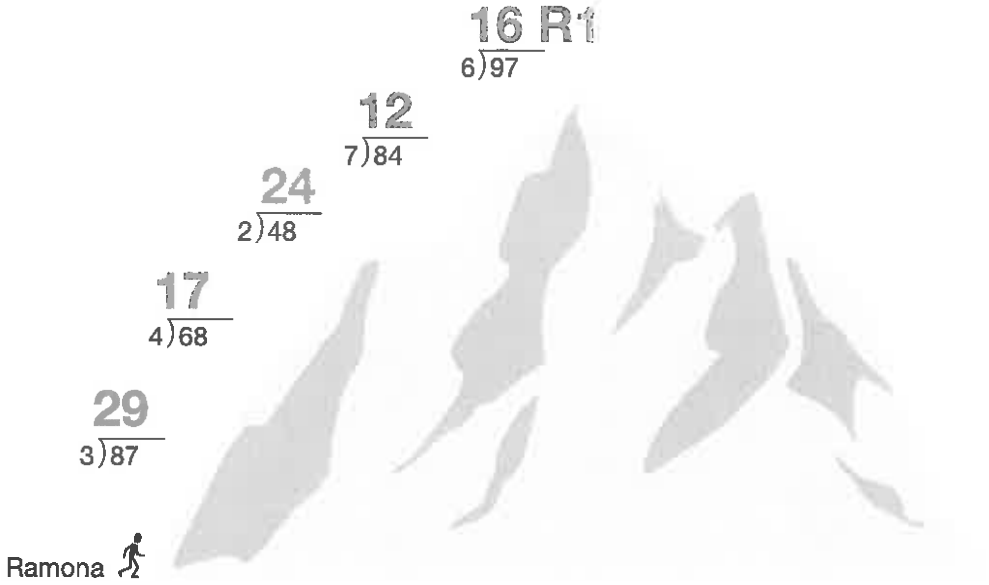
Name _____

Enrichment
5-4

Will They Reach the Top?

Begin at the bottom of each mountain and solve each division problem. If there is a remainder, the hiker stops at that problem. If there is no remainder, the hiker keeps climbing.

1.



2.

3. Which hiker made it farther up the mountain?

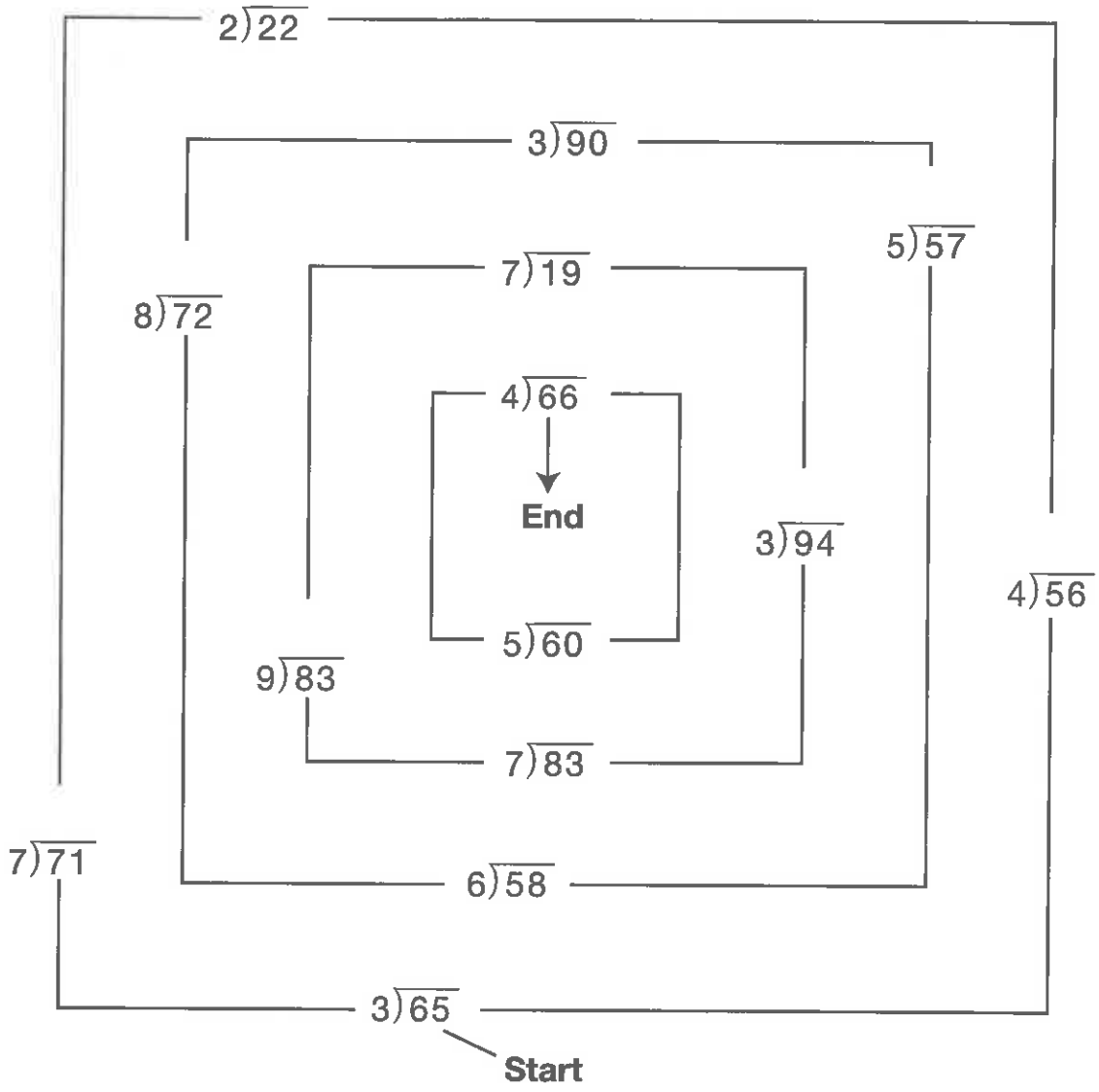
Ramona

Name _____

Enrichment
5-5

Division Amazement

1. Trace a path to the middle of the maze. You can pass through only if the remainder is 2 when you divide.



2. Solve **only** the problem described. **a.** 2)91 **b.** 4)58 **c.** 8)79

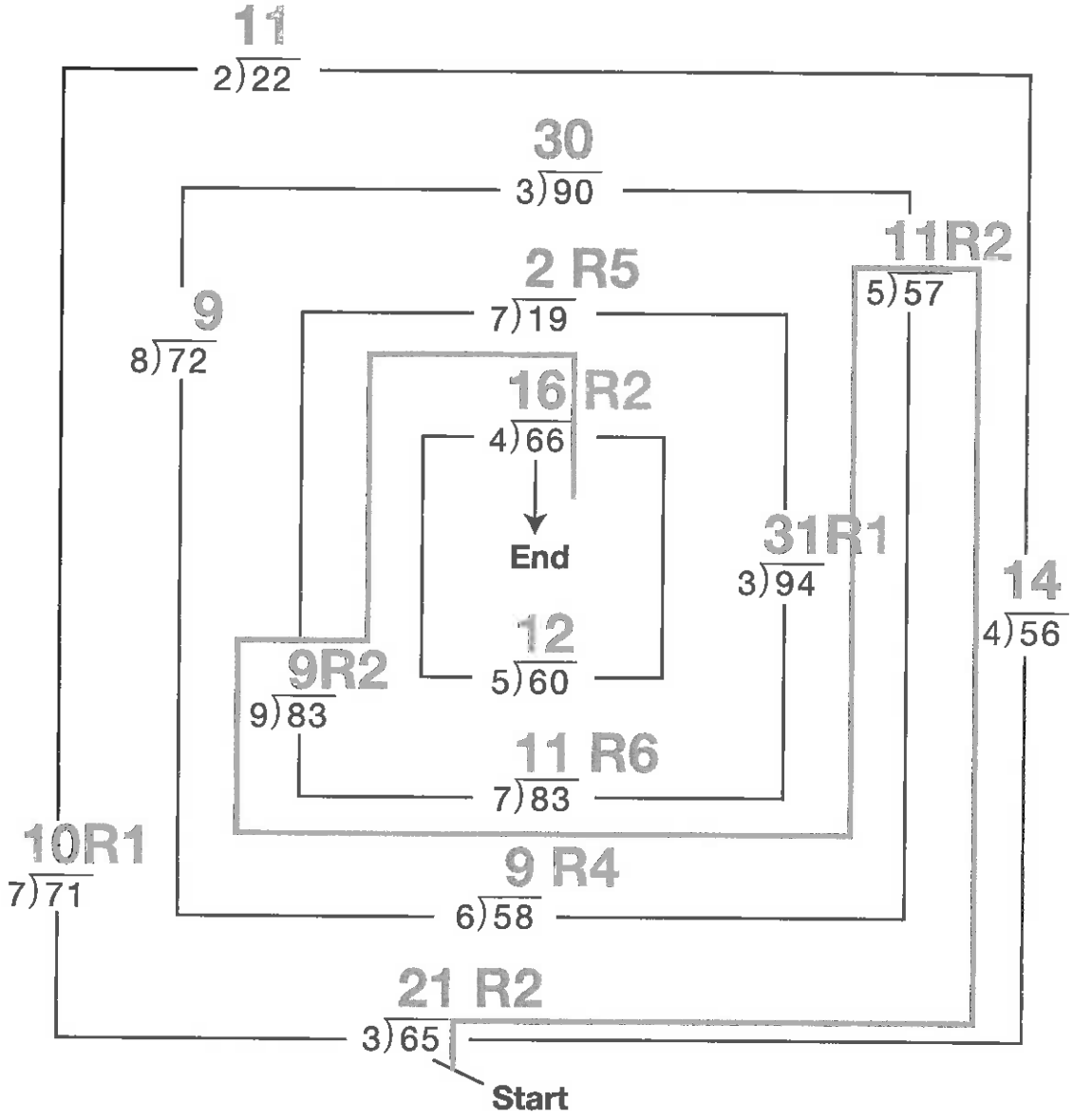
- The quotient has 2 digits.
- The remainder is greater than 1.

Name _____

Enrichment
5-5

Division Amazement

1. Trace a path to the middle of the maze. You can pass through only if the remainder is 2 when you divide.



2. Solve **only** the problem described.

a. $2\overline{)91}$ **b.** $4\overline{)58}$ **c.** $8\overline{)79}$

- The quotient has 2 digits.
- The remainder is greater than 1.

$$\begin{array}{r} 14\text{R}2 \\ -4 \\ \hline 18 \\ -16 \\ \hline 2 \end{array}$$

Name _____

Enrichment
5-6

Fact Path

Solve each problem by following the arrows. Write the final answer in the last box.

1.	21	→	÷ 7	→	× 2	→	÷ 6	→	
2.	54	→	÷ 6	→	÷ 3	→	× 5	→	
3.	8	→	× 3	→	÷ 4	→	× 7	→	
4.	5	→	÷ 5	→	× 9	→	× 4	→	
5.	72	→	÷ 9	→	÷ 2	→	÷ 2	→	
6.	6	→	× 2	→	÷ 4	→	× 6	→	
7.	30	→	÷ 5	→	× 0	→	× 8	→	
8.	8	→	× 3	→	÷ 6	→	+ 5	→	
9.	35	→	÷ 7	→	+ 4	→	× 9	→	
10.	4	→	× 7	→	− 3	→	÷ 5	→	

Write two fact paths. Include a multiplication step and a division step in each path.

11.		→		→		→		→	
12.		→		→		→		→	

Name _____

Enrichment
5-6

Fact Path

Solve each problem by following the arrows. Write the final answer in the last box.

1.	21	→	÷ 7	→	× 2	→	÷ 6	→	1
2.	54	→	÷ 6	→	÷ 3	→	× 5	→	15
3.	8	→	× 3	→	÷ 4	→	× 7	→	42
4.	5	→	÷ 5	→	× 9	→	× 4	→	36
5.	72	→	÷ 9	→	÷ 2	→	÷ 2	→	2
6.	6	→	× 2	→	÷ 4	→	× 6	→	18
7.	30	→	÷ 5	→	× 0	→	× 8	→	0
8.	8	→	× 3	→	÷ 6	→	+ 5	→	9
9.	35	→	÷ 7	→	+ 4	→	× 9	→	81
10.	4	→	× 7	→	− 3	→	÷ 5	→	5

Write two fact paths. Include a multiplication step and a division step in each path.

Check students' work.

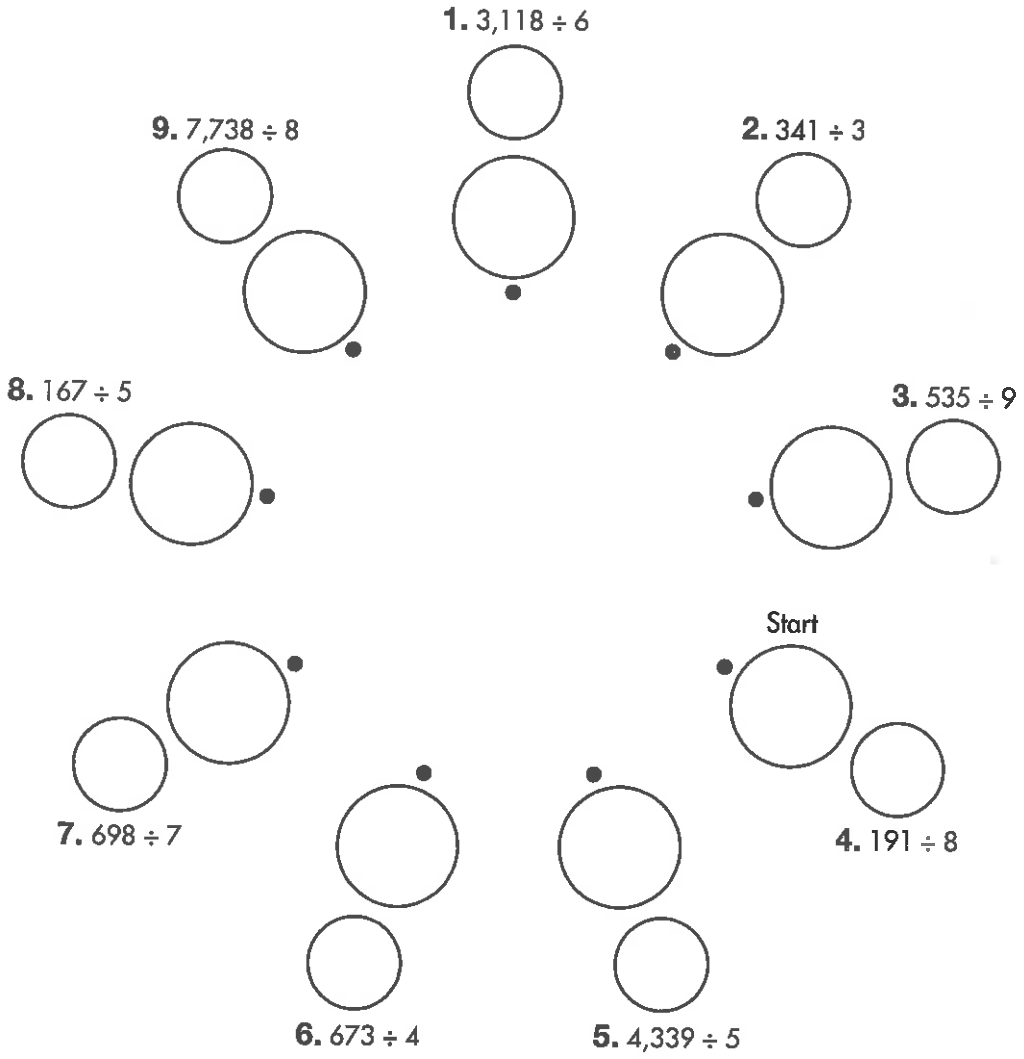
11.		→		→		→		→	
12.		→		→		→		→	

Name _____

Enrichment
5-7

Division Star

Divide. Write the quotient in the large circle. Write the remainder, if there is one, in the small circle.



Start with the least quotient. Use a ruler to draw a line from each quotient to the next greater one. Connect the greatest quotient to the one with which you started.

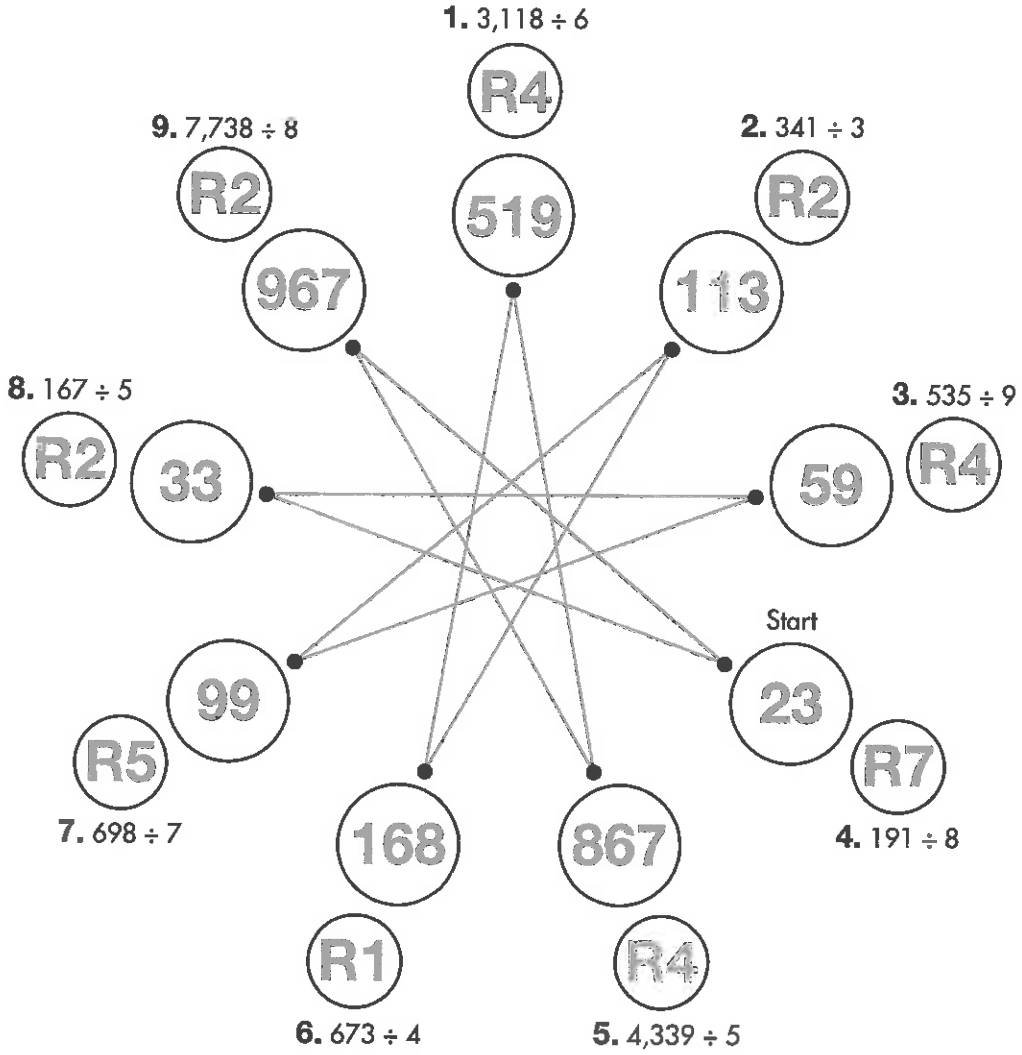
10. What is the shape you drew? _____

Name _____

Enrichment
5-7

Division Star

Divide. Write the quotient in the large circle. Write the remainder, if there is one, in the small circle.



Start with the least quotient. Use a ruler to draw a line from each quotient to the next greater one. Connect the greatest quotient to the one with which you started.

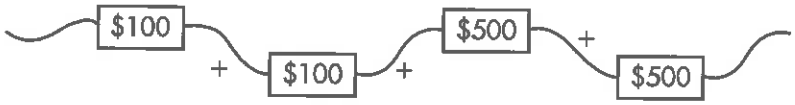
10. What is the shape you drew? 9-pointed star

Name _____

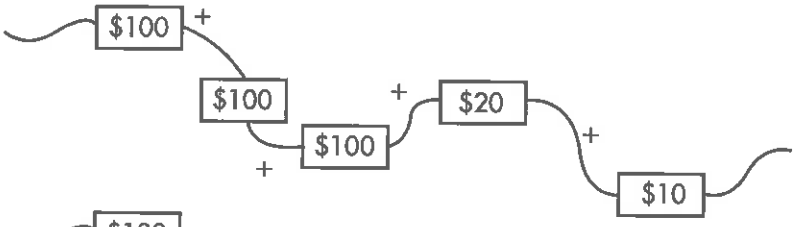
Enrichment
5-8

Follow the Money Trail

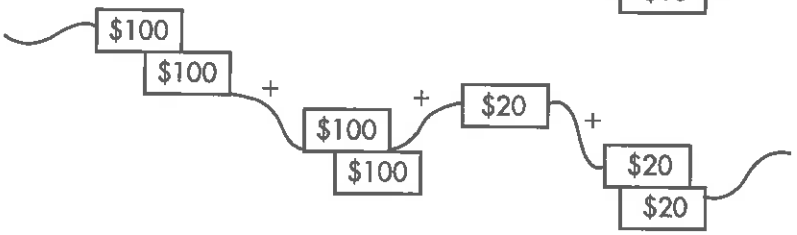
Each trail below has money that you collect as you walk. At the end of each trail, the total amount of money is divided by a divisor. You receive the quotient.

1. 

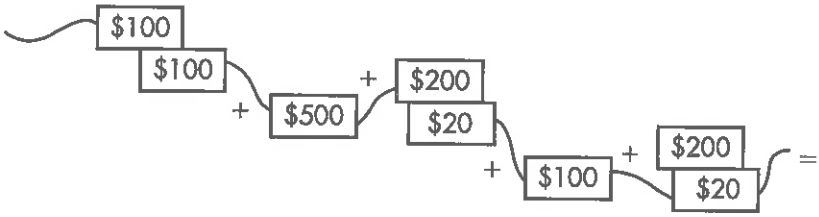
= _____ ÷ 2 = _____

2. 

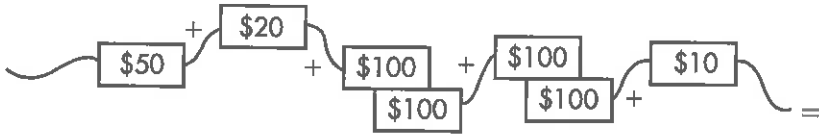
= _____ ÷ 3 = _____

3. 

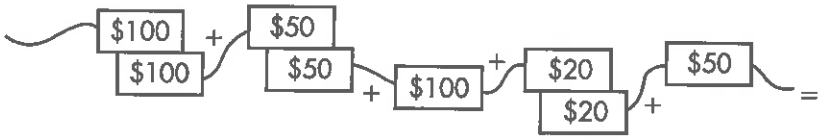
= _____ ÷ 4 = _____

4. 

= _____ ÷ 5 = _____

5. 

= _____ ÷ 6 = _____

6. 

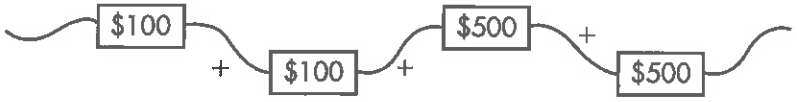
= _____ ÷ 7 = _____

Name _____

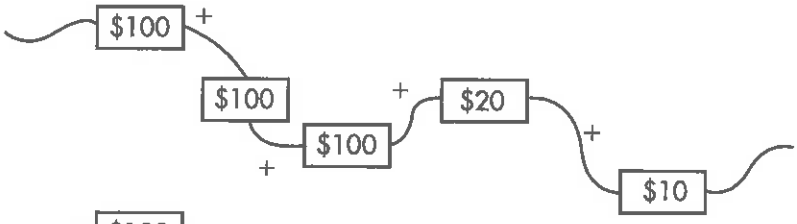
Enrichment
5-8

Follow the Money Trail

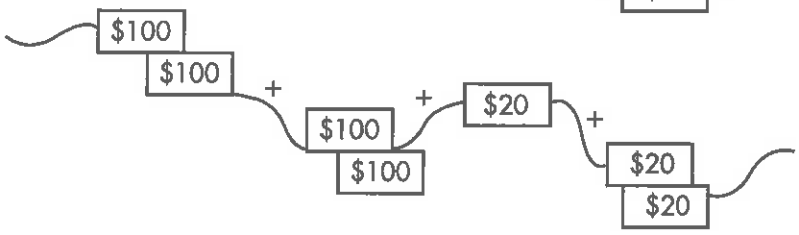
Each trail below has money that you collect as you walk. At the end of each trail, the total amount of money is divided by a divisor. You receive the quotient.

1. 

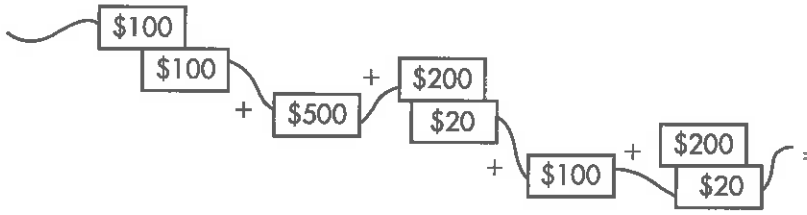
= $1,200 ÷ 2 = $600

2. 

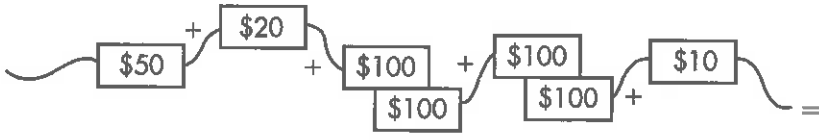
= $330 ÷ 3 = $110

3. 

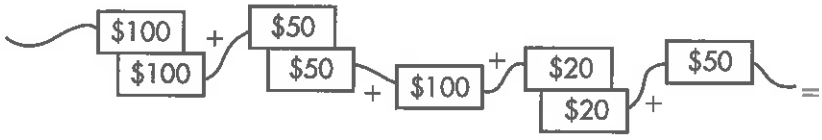
= $460 ÷ 4 = $115

4. 

= $1,240 ÷ 5 = $248

5. 

= $480 ÷ 6 = $80

6. 

= $490 ÷ 7 = $70

Name _____

Enrichment
5-9

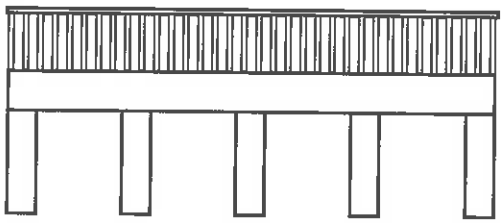
Is the Bridge Safe?

The Davis Construction Company follows certain rules for building safe bridges: The distance between the bridge's supports, called the span, must not be more than 100 ft. The chart at the right shows how to classify bridges as very safe, safe, or unsafe. Find the span length of each bridge below. Then tell whether the bridge is very safe, safe, or unsafe.

Bridge Safety Ratings

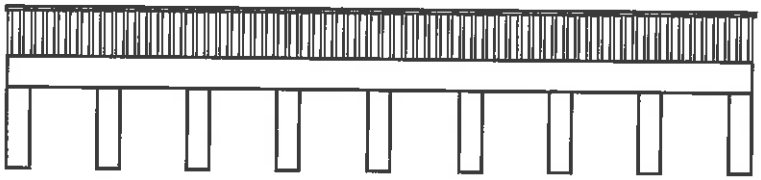
Length of Span	Rating
0 to 50 ft	very safe
51 to 100 ft	safe
101 ft or more	unsafe

1. Length of bridge: 252 ft



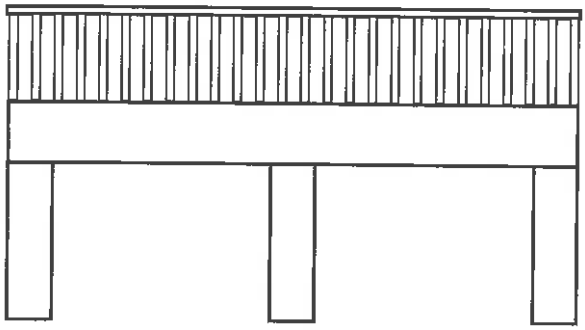
_____

2. Length of bridge: 336 ft



_____

3. Length of bridge: 266 ft



_____

Name _____

Enrichment
5-9

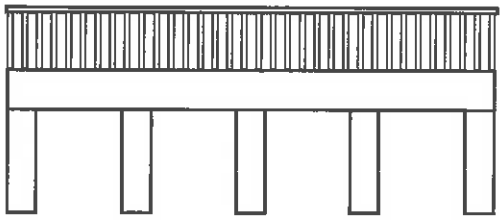
Is the Bridge Safe?

The Davis Construction Company follows certain rules for building safe bridges: The distance between the bridge's supports, called the span, must not be more than 100 ft. The chart at the right shows how to classify bridges as very safe, safe, or unsafe. Find the span length of each bridge below. Then tell whether the bridge is very safe, safe, or unsafe.

Bridge Safety Ratings

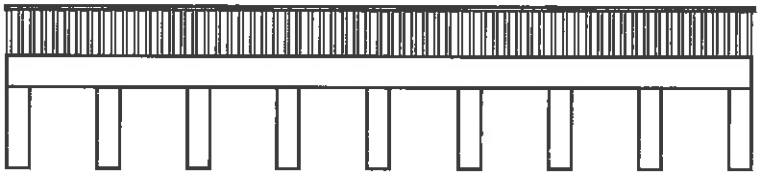
Length of Span	Rating
0 to 50 ft	very safe
51 to 100 ft	safe
101 ft or more	unsafe

1. Length of bridge: 252 ft



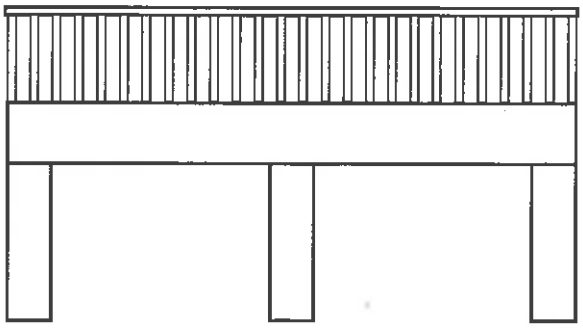
63 ft; Safe

2. Length of bridge: 336 ft



42 ft; Very safe

3. Length of bridge: 266 ft



133 ft; Unsafe

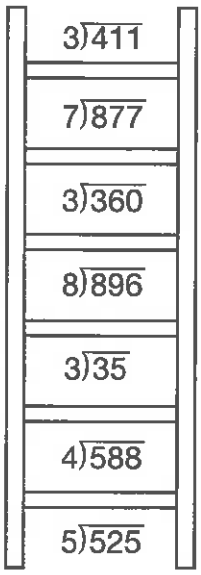
Name _____

Enrichment
5-10

Up and Up!

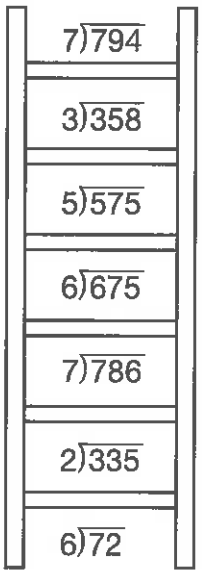
Begin at the bottom of each ladder and solve each division problem to get to the top. If the problem has no remainder, climb two problems up. If the problem has a remainder, go down one problem.

Finish!



Ladder 1

Finish!



Ladder 2

Explain any difficulty you noticed in getting to the finish from Ladder 2.

_____

_____

_____

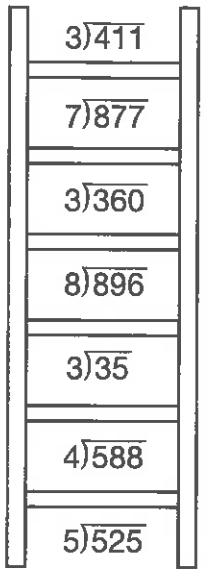
Name _____

Enrichment
5-10

Up and Up!

Begin at the bottom of each ladder and solve each division problem to get to the top. If the problem has no remainder, climb two problems up. If the problem has a remainder, go down one problem.

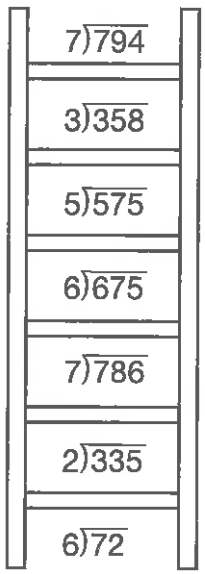
Finish!



137
125 R2
120
112
11 R2
147
105

Ladder 1

Finish!



113 R3
119 R1
115
112 R3
112 R2
167 R1
12

Ladder 2

Explain any difficulty you noticed in getting to the finish from Ladder 2.

Answers will vary. Sample: In Ladder 2, you can never get to Finish! because you enter a loop.