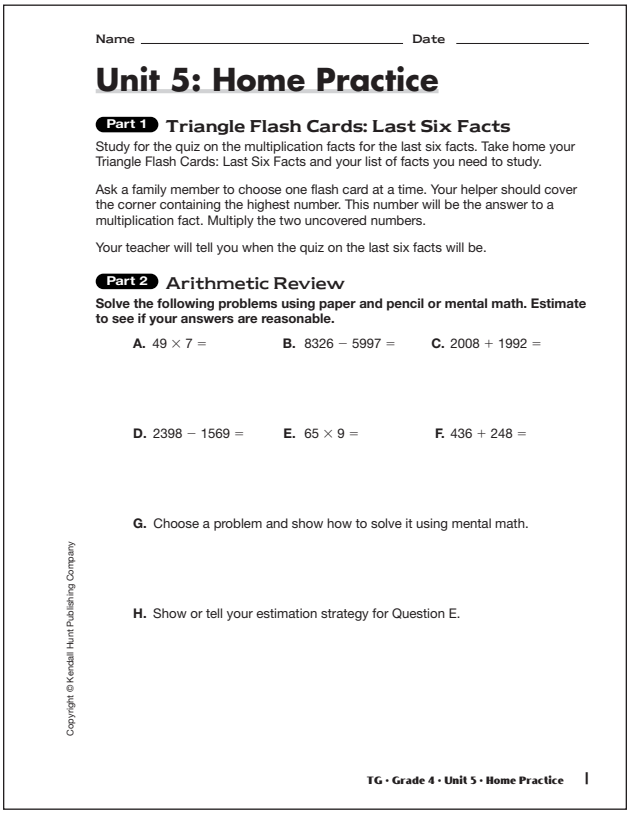

Name _____ Date _____

Unit 5: Home Practice

Part 1 **Triangle Flash Cards: Last Six Facts**

Study for the quiz on the multiplication facts for the last six facts. Take home your Triangle Flash Cards: Last Six Facts and your list of facts you need to study.

Ask a family member to choose one flash card at a time. Your helper should cover the corner containing the highest number. This number will be the answer to a multiplication fact. Multiply the two uncovered numbers.

Your teacher will tell you when the quiz on the last six facts will be.

Part 2 **Arithmetic Review**

Solve the following problems using paper and pencil or mental math. Estimate to see if your answers are reasonable.

A. 49 × 7 = **B.** 8326 − 5997 = **C.** 2008 + 1992 =

D. 2398 − 1569 = **E.** 65 × 9 = **F.** 436 + 248 =

G. Choose a problem and show how to solve it using mental math.

H. Show or tell your estimation strategy for Question E.

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Part 2. Arithmetic Review

Questions A–H (TG p. 1)

A. 343 **B.** 2329

C. 4000 **D.** 829

E. 585 **F.** 684

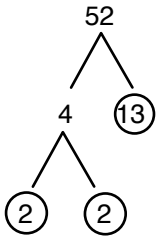
G. Answer will vary. Possible response for A: 50 × 7 = 350; 350 – 7 = 343

H. Strategies will vary. The product is less than 650 because 65 × 10 = 650.

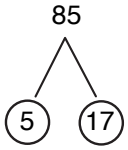
Part 3. Factor Trees and Exponents

Questions 1–4 (TG p. 2)

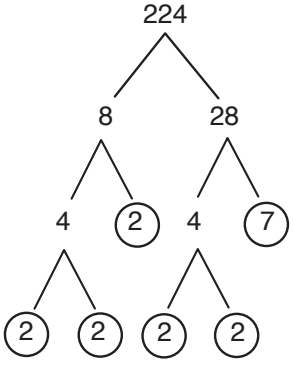
1. $2 \times 2 \times 13 = 52$. Students might draw a factor tree as shown below.



2. $5 \times 17 = 85$. Students might draw a factor tree as shown below.



3. $2 \times 2 \times 2 \times 2 \times 2 \times 7 = 224$. Students might draw a factor tree as shown below.



4. A. $4^2 \times 2 = 32$

B. $5^2 \times 2 = 50$

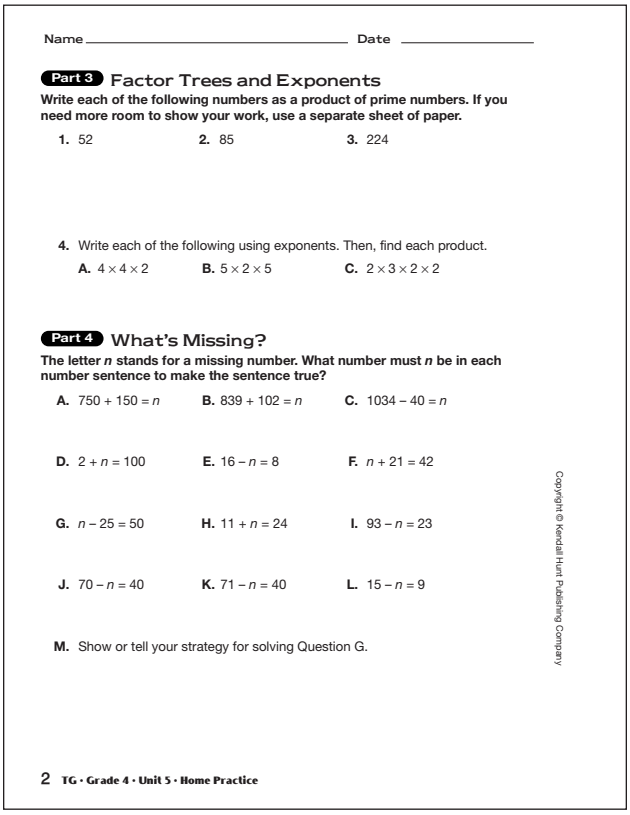
C. $2^3 \times 3 = 24$

Part 4. What's Missing?

Questions A–L (TG p. 48)

A. 900	**B.** 941	**C.** 994
D. 98	**E.** 8	**F.** 21
G. 75	**H.** 13	**I.** 70
J. 30	**K.** 31	**L.** 6

M. Possible response: I think of quarters. $75¢ - 25¢ = 50¢$.



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Part 3 Factor Trees and Exponents

Write each of the following numbers as a product of prime numbers. If you need more room to show your work, use a separate sheet of paper.

1. 52 **2.** 85 **3.** 224

4. Write each of the following using exponents. Then, find each product.

A. $4 \times 4 \times 2$ **B.** $5 \times 2 \times 5$ **C.** $2 \times 3 \times 2 \times 2$

Part 4 What's Missing?

The letter *n* stands for a missing number. What number must *n* be in each number sentence to make the sentence true?

A. $750 + 150 = n$ **B.** $839 + 102 = n$ **C.** $1034 - 40 = n$

D. $2 + n = 100$ **E.** $16 - n = 8$ **F.** $n + 21 = 42$

G. $n - 25 = 50$ **H.** $11 + n = 24$ **I.** $93 - n = 23$

J. $70 - n = 40$ **K.** $71 - n = 40$ **L.** $15 - n = 9$

M. Show or tell your strategy for solving Question G.

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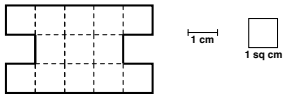
Name _____ Date _____

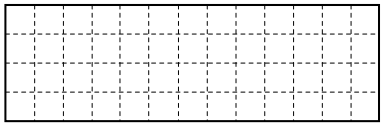
Part 5 Area and Perimeter

1. **A.** Find the area of the shape below in square centimeters.

_____

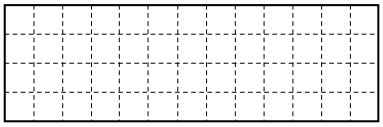


B. Find the perimeter of the shape. _____



2. **A.** Draw a shape that has the same area but a smaller perimeter.

B. Write the perimeter of your shape in Question 2A. _____



D. Write the perimeter of your shape in Question 2C. _____

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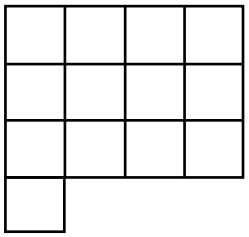
Part 5. Area and Perimeter

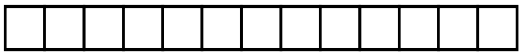
Questions 1–2 (TG p. 3)

1. **A.** 13 square centimeters
   B. 20 centimeters
2. **A.** Possible response:



B. Perimeters will vary: Example 2A is 16cm.

C.



D. 28 centimeters

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Part 6 Big Base-Ten Hoppers

1. +1 +1 +10 +100 +100 +100 +100 +100

488 ____ ____ ____

A. Fill in the blanks to show where the hopper lands.

B. How far is it from 488 to 1000? _____

C. Show another way for a hopper to start at 488 and stop at 1000.

2. +400 +5 +90

505 905 910 1000

A. Show a different way the hopper can start at 505 and land on 1000.

B. Write a number sentence to show how it moved.

3. +1 +1 +1 +1 +1 +1 +1 +1 +10 +10 +10 +100 +100

762 770 800 1000

A. How far is it from 762 to 1000? _____

B. Complete the number sentences.

762 + ☐ = 1000 1000 − 762 = ☐

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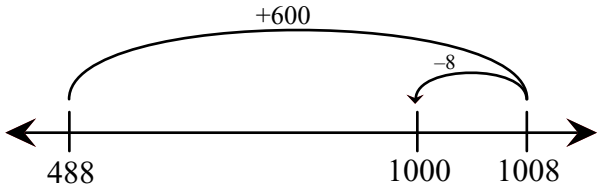
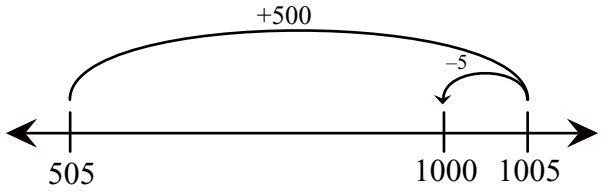
Part 6. Big Base-Ten Hoppers

Questions 1–3 (TG p. 4)

1. **A.** 490, 500, 1000
   B. 512
   C. Answers will vary.



2. **A.** Possible response:

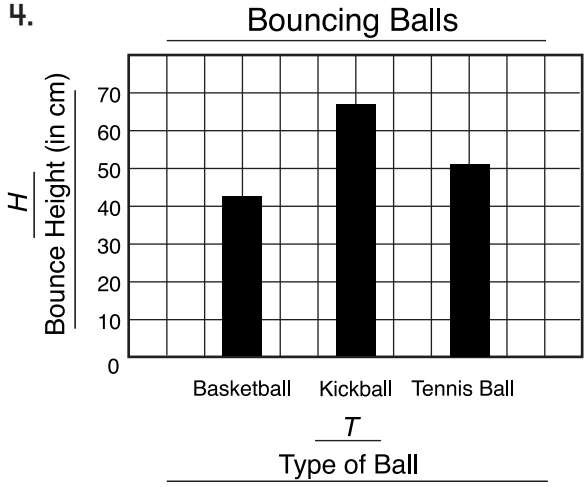


B. Number sentences will vary.
$505 + 500 - 5 = 1000$

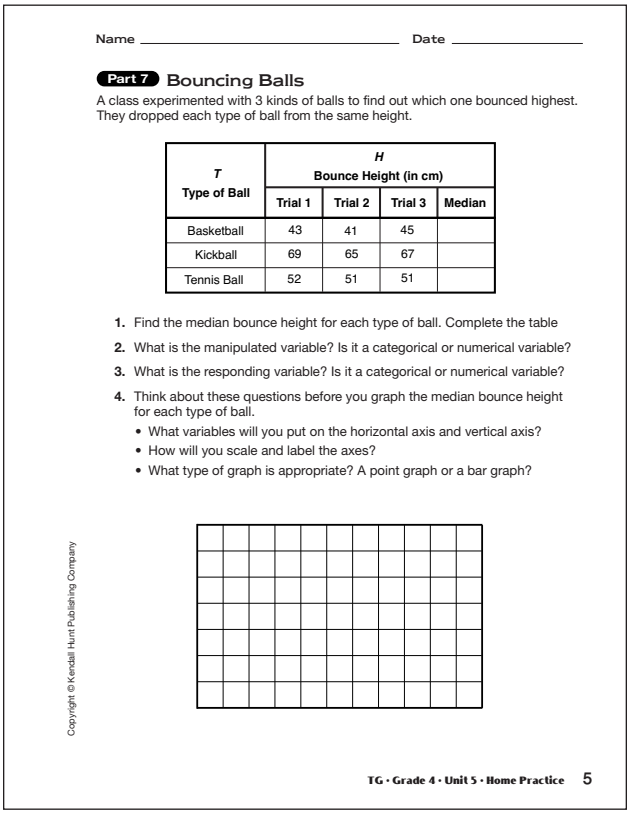
3. **A.** 238
   B. 238; 238

Part 7. Bouncing Balls

Questions 1–4 (TG p. 5)

1. Basketball: 43, Kickball: 67, Tennis Ball: 51
2. Type of Ball, categorical
3. Bounce Height, numerical
4. 

Compare the graphs in Part 7 and DPP item X. When both of the variables to be graphed are numerical, as in the 200-meter Backstroke graph in DPP item X, a point graph is often the appropriate way to represent the data. Since the values for both of these variables are numbers and since it makes sense to talk about values between the data points, such as 1969, 1970, etc., we can use points and lines. However, in Part 7, it does not make sense to talk about values between the values on the horizontal axis (basketball, kickball, and tennis ball). A bar graph is an appropriate type of graph for representing categorical data. The values (basketball, kickball, and tennis ball) on the graph in Part 7 can also be placed in any order on the graph unlike the numerical values on the horizontal axis in the graph in DPP item X.



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Part 7 Bouncing Balls

A class experimented with 3 kinds of balls to find out which one bounced highest. They dropped each type of ball from the same height.

T Type of Ball	*H* Bounce Height (in cm)			
	Trial 1	Trial 2	Trial 3	Median
Basketball	43	41	45	
Kickball	69	65	67	
Tennis Ball	52	51	51	

1. Find the median bounce height for each type of ball. Complete the table
2. What is the manipulated variable? Is it a categorical or numerical variable?
3. What is the responding variable? Is it a categorical or numerical variable?
4. Think about these questions before you graph the median bounce height for each type of ball.
   - What variables will you put on the horizontal axis and vertical axis?
   - How will you scale and label the axes?
   - What type of graph is appropriate? A point graph or a bar graph?

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