Unit 3: Home Practice

Part 1 Triangle Flash Cards: 5s, 10s, and Square Numbers

Study for the quiz on the multiplication facts for the 5s, 10s, and square numbers. Take home your Triangle Flash Cards: 5s, 10s, and Square Numbers and your list of facts you need to study.

To use the flash cards, ask a family member to choose one flash card at a time. He or she should cover the corner containing the highest number, the shaded number. This number will be the answer to a multiplication fact. Multiply the two uncovered numbers.

Study the math facts in small groups. Choose eight to ten facts to study each night. Your teacher will tell you when the quiz on the 5s and 10s and the quiz on the square numbers will be.

Part 2 Fact Families

For each fact given, write the other number sentences of the same fact family.

A.
$$90 \div 10 = 9$$

B. $15 \div 5 = 3$

C. $9 \times 9 = 81$

D. $5 \times 9 = 45$

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Part 3 Solving Multiplication Stories

- 1. Grace bought a bag of sour candies with her allowance. There are 35 candies in the bag. Grace wants to eat the same number of candies each day and she wants the candy to last all week. How many candies can Grace eat each day? Write a number sentence.
- 2. Michael's brother works at Tony's Pizza Place making pizza. He makes \$10 per hour. On Friday night, he worked 5 hours. On Saturday, he worked 8 hours. How much money did he earn on each day?

How much did he earn both days together? Show how you know.

- **3.** There are 6 children in Jackie's family. Jackie's mother bought each child 6 pairs of socks at the start of the school year. How many pairs of socks did Jackie's mother buy? Write a number sentence.
- **4.** Jacob and John started a club. There are 8 boys in the club. Each boy paid a membership fee of 8 dimes to be in the club. How many dimes did the boys pay altogether? How much money was this? Show how you know.
- 5. Find a number to make each sentence true.

A.
$$5 \times \boxed{} = 30$$

B. 20 =
$$\times$$
 4

C.
$$= 5 \times 8$$

D.
$$10 \times 1 = 2 \times$$

Part 4 Multiplication: Factors, Multiples, Primes, and Squares

To solve the following problems, you may use your *Student Guide* as a reference. See Unit 3 Lessons 1, 3, and 7.

1. Is 34 a multiple of 2? Explain why or why not.

2. Is 3 a factor of 35? Explain why or why not.

3. Name 10 numbers that are multiples of 2.

4. Name 10 numbers that have 3 as a factor.

5. Is 7 a prime number? Why or why not?

6. A.
$$5^2 =$$

B.
$$10^2 =$$

C.
$$2^2 =$$

D.
$$3^2 =$$

Part 5 Working at the Grocery Store

Choose an appropriate tool to help you solve each of the problems. Use a picture, paper and pencil, or a calculator. Use pictures, number sentences, or words to show how you solve each problem.

1. Keenya's sister, Shenika, works at a grocery store. Today she is stocking shelves. She stacks soup cans three cans high. If she makes 6 stacks, how many soup cans will she shelve?

2. Shenika brings in some shopping carts from the parking lot. She makes 4 rows of carts. She wants to place the same number of carts in each row. If she brings in 17 carts, how many carts can she place in each row?

3. Shenika gets paid six dollars an hour. Last week she worked 15 hours. How much did she earn?

4. When Shenika works the cash register on a Saturday, she works nonstop. In the express line, customers may purchase only 10 items or less. When working the express line, she can ring up about 5 customers in 15 minutes. If she works a 6-hour day, about how many customers can she serve?

- **5.** The grocery bill for one of Shenika's customers was \$15.52. The customer gave Shenika \$20.02. How much change did the customer receive?
- 6. Grapes are on sale for 69¢ a pound. How much do 3 pounds of grapes cost?
- 7. For every \$3 a customer spends at the grocery store, he or she gets a stamp that can be used for purchasing dishes. One customer bought groceries for herself and an elderly neighbor. The two separate bills were \$43 and \$28. How many stamps should this customer receive for herself and her neighbor?
- **8.** Keenya went to the store to get groceries for her mom. She had \$10 and wasn't sure if she had enough money so she used mental math to make an estimate before she went to the cash register. Keenya had these items in her cart: dish soap for \$3.19, carrots for \$1.59, bread for \$1.89, milk for \$3.89, and a can of beans for \$.49.
 - **A.** Estimate the total cost of these groceries to tell Keenya whether she will have enough money before she gets in the check-out line. Do not calculate the exact total. Show how you estimated below.
 - **B.** If Keenya will have enough money, do you think she will have enough left over to buy a candy bar that costs \$.79?
 - **C.** If Keenya will not have enough money, what item or items would you tell her to put back to get her bill under \$10.00? Explain your choices.

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Part 2

Questions A-D (TG p. 1)

A.
$$90 \div 10 = 9$$
 $90 \div 9 = 10$ $10 \times 9 = 90$ $9 \times 10 = 90$

B. $15 \div 5 = 3$ $15 \div 3 = 5$ $3 \times 5 = 15$ $5 \times 3 = 15$

C. $9 \times 9 = 81$ $81 \div 9 = 9$

D.
$$5 \times 9 = 45$$
 $9 \times 5 = 45$ $45 \div 9 = 5$ $45 \div 5 = 9$

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Par	Solving Multiplication Stories
1.	Grace bought a bag of sour candies with her allowance. There are 35 candies in the bag. Grace wants to eat the same number of candies each day and she wants the candy to last all week. How many candies can Grace eat each day? Write a number sentence.
2.	Michael's brother works at Tony's Pizza Place making pizza. He makes \$10 per hour. On Friday night, he worked 5 hours. On Saturday, he worked 8 hours. How much money did he earn on each day?
	How much did he earn both days together? Show how you know.
3.	There are 6 children in Jackie's family. Jackie's mother bought each child 6 pairs of socks at the start of the school year. How many pairs of socks did Jackie's mother buy? Write a number sentence.
4.	Jacob and John started a club. There are 8 boys in the club. Each boy paid a membership fee of 8 dimes to be in the club. How many dimes did the boys pay altogether? How much money was this? Show how you know.
5.	Find a number to make each sentence true.
	A. $5 \times \boxed{} = 30$ B. $20 = \boxed{} \times 4$
	C. $= 5 \times 8$ D. $10 \times 1 = 2 \times$

Part 3

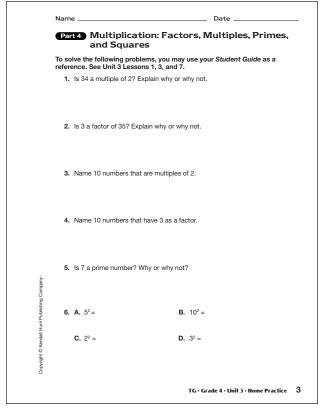
Questions 1-5 (TG p. 2)

- **1.** 5 candies; $35 \div 7 = 5$
- 2. He earned \$50 on Friday. He earned \$80 on Saturday. He earned \$130 both days together. $5 \text{ hours} \times $10 = 50 $8 \text{ hours} \times $10 = 80 \$50 + \$80 = \$130
- **3.** 36 pairs of socks; $6 \times 6 = 36$
- **4.** 64 dimes altogether \$6.40 8 boys × 8 dimes = 64 dimes
- **5. A.** 6 **B.** 5 **C.** 40 **D.** 5

Part 4

Questions 1-6 (TG p. 3)

- **1.** Yes. $17 \times 2 = 34$
- **2.** No. $35 \div 3 = 11.666...$ There is no whole \times 3 = 35. number such that
- **3.** Any even number; e.g., 2, 4, 6, 8, 10, 12, 14, 16,
- **4.** Any multiple of 3; e.g., 3, 6, 9, 12, 15, 18, 21, 24, 27, 30
- **5.** Yes, 7 is a prime number. The only factors of 7 are 1 and 7. Only one rectangle can be made with 7 tiles: 1×7 .
- **6. A.** 25
- **B.** 100
- **C.** 4
- **D.** 9



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Part 5 Working at the Grocery Store

Choose an appropriate tool to help you solve each of the problems. Use a picture, paper and pencil, or a calculator. Use pictures, number sentences, or words to show how you solve each problem.

- Keenya's sister, Shenika, works at a grocery store. Today she is stocking shelves. She stacks soup cans three cans high. If she makes 6 stacks, how many soup cans will she shelve?
- Shenika brings in some shopping carts from the parking lot. She makes
 4 rows of carts. She wants to place the same number of carts in each row.
 If she brings in 17 carts, how many carts can she place in each row?
- Shenika gets paid six dollars an hour. Last week she worked 15 hours. How much did she earn?
- 4. When Shenika works the cash register on a Saturday, she works nonstop. In the express line, customers may purchase only 10 items or less. When working the express line, she can ring up about 5 customers in 15 minutes. If she works a 6-hour day, about how many customers can she serve?
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Name ______ Date

- 5. The grocery bill for one of Shenika's customers was \$15.52. The customer gave Shenika \$20.02. How much change did the customer receive?
- 6. Grapes are on sale for 69¢ a pound. How much do 3 pounds of grapes cost?
- 7. For every \$3 a customer spends at the grocery store, he or she gets a stamp that can be used for purchasing dishes. One customer bought groceries for herself and an elderly neighbor. The two separate bills were \$43 and \$28. How many stamps should this customer receive for herself and her neighbor?
- Keenya went to the store to get groceries for her mom. She had \$10 and
 wasn't sure if she had enough money so she used mental math to make an
 estimate before she went to the cash register. Keenya had these items in her
 cart: dish soap for \$3.19, carrots for \$1.59, bread for \$1.89, milk for \$3.89,
 and a can of beans for \$.49.
 - Estimate the total cost of these groceries to tell Keenya whether she will have enough money before she gets in the check-out line. Do not calculate the exact total. Show how you estimated below.
 - B. If Keenya will have enough money, do you think she will have enough left over to buy a candy bar that costs \$.79?
 - **C.** If Keenya will not have enough money, what item or items would you tell her to put back to get her bill under \$10.00? Explain your choices.

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Part 5

Questions 1–8 (TG pp. 4–5)

- **1.** 18 soup cans; $3 \times 6 = 18$
- **2.** Four is not a factor of 17, so she will not have equal rows:
 - 3 rows with 4 carts:
 - 1 row with 5 carts
- **3.** \$90
- **4.** 120 customers; she can ring up 20 customers in one hour; $6 \times 20 = 120$
- **5.** \$4.50
- **6.** \$2.07; one possible strategy: 69ϕ is one less than 70ϕ . $3 \times 7 = \$2.10$ \$2.10 .03 = \$2.07
- **7.** 23 stamps
 - $43 \div 3 = 14$ with 1 leftover
 - $28 \div 3 = 9$ with 1 leftover
 - 14 + 9 = 23
- **8. A.** Estimates will vary. A possible strategy using friendly numbers: \$3 + \$2 + \$2 + \$4 + .50 = \$11.50. She probably will not have enough money.
 - **B.** No, she will not have enough to buy the candy bar.
 - **C.** Answers will vary. One possible response: Since she will be about \$1.50 over, she could return either the carrots or the bread.