

# Unit 11: Home Practice

## Part 1 Triangle Flash Cards: 9s

Study for the quiz on the multiplication facts for the 9s. Take home your Triangle Flash Cards: 9s and the list of facts you need to study.

Ask a family member to choose one flash card at a time. He or she should cover the largest number. Solve a multiplication fact with the two uncovered numbers. Your teacher will tell you when the quiz on the multiplication facts for the 9s will be.

## Part 2 Solve Problems with Addition and Subtraction

Use strategies you have learned to solve each problem.

1.  $160 - 70 = \underline{\quad}$     2.  $120 - 50 = \underline{\quad}$     3.  $140 - 60 = \underline{\quad}$

4.  $82 + \underline{\quad} = 100$     5.  $53 + \underline{\quad} = 100$     6.  $44 + \underline{\quad} = 100$

7. A. Show or tell how you solved Question 3.

B. Show or tell how you solved Question 5.

8. When Frank cleaned his mom's car he found some coins under the seats. His mom let him keep the coins and gave him \$.25 more for cleaning the car. Now he has \$2.00.

A. How much money did Frank find in the car? \_\_\_\_\_

B. Frank found a combination of quarters, dimes, and nickles. He found fewer than 15 coins. How many of each could he have found? Give two possible answers.

**Part 3** Problem Solving with Multiplication and Division

**Solve the following problems. Show how you found each answer.**

1. One Saturday, 37 people volunteer to help restore a prairie. The team leader divides them into teams. He wants each team to have at least 5 people but not more than 8 people. Every person must be on a team. Show or tell all the ways the team leader can divide the group.
  
2. Mrs. Hix is planning for summer camp. Each cabin at the camp can hold 15 campers. There are 12 cabins. If all the cabins are full, how many campers can Mrs. Hix expect at camp? Show or tell how you know.
  
3. A group of 23 campers is going to visit the state capitol. Each car can carry no more than 3 campers. How many cars are needed? Show or tell how you know.
  
4. Some campers are going on a night hike. They will need one adult for every 6 campers who are hiking. If 32 campers sign up for the hike, how many adults will they need? Show or tell how you know.

**Part 4** Thinking About Numbers

1. Beverly collected 728 pennies. She sorted them into 3 jars. Look at each sentence below and decide which jar you would choose if she let you keep the one with the most pennies. Explain why you chose that jar.

**Jar A:** Has as many pennies as the “2” stands for in 728.

**Jar B:** Has as many pennies as the “7” stands for in 728.

**Jar C:** Has as many pennies as the “8” stands for in 728.

2. **A.** Write a story for this multiplication sentence:  $20 \times 3 = ?$

- B.** Use your story to label the number sentence to show what each number means.

$$20 \underline{\hspace{1cm}} \times 3 \underline{\hspace{1cm}} = \underline{\hspace{2cm}}$$

3. **A.** How many leaves do 30 four-leaf clovers have?

- B.** Show or tell how you solved the problem.

4. **A.** If a +6 hopper starts at 0 and takes 9 hops, where will it land?

- B.** Write a number sentence to show how the hopper moves.

**Part 5 Multiplication Strategies for the 9s**

1. Jason said since he knows that  $2 \times 9 = 18$ , he can use a doubling strategy to solve  $4 \times 9$ . Use Jason's strategy to solve  $4 \times 9$ .
2. Carla said since she knows  $10 \times 7 = 70$ , she can use this to help her solve  $9 \times 7$ . Show how to use  $10 \times 7$  to solve  $9 \times 7$ .
3. Luis said since he knows  $8 \times 8 = 64$ , he can use this fact to help him solve  $8 \times 9$ . Show how to use  $8 \times 8$  to solve  $8 \times 9$ .

4. Show how to solve these problems.

**A.**  $9 \times 5 =$

**B.**  $6 \times 9 =$

**C.**  $9 \times 9 =$

5. Julia uses a break-apart strategy to solve  $13 \times 9$ . She thinks  $10 + 3 = 13$ , so she multiplies:

$$10 \times 9 + 3 \times 9 = 90 + 27$$

$$90 + 27 = 117$$

Use Julia's break-apart strategy to solve these problems.

**A.**  $14 \times 9 =$

**B.**  $19 \times 9 =$

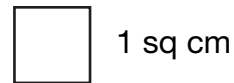
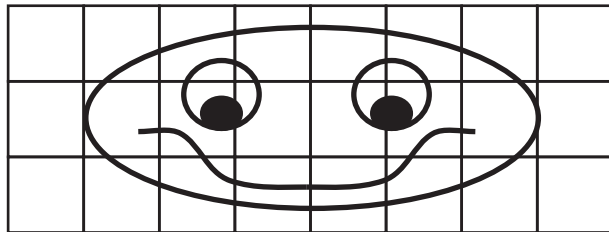
**C.**  $16 \times 9 =$

## **Part 6** It is About Time

1. Moe and Joe decided to run one mile. They both started to run at 2:09. Joe finished in 14 minutes. Moe finished at 2:22. Who finished first? Show or tell how you know.
  
2. **A.** Fern took her brothers to the park to play. They left their house at 10:20 am. It took them 15 minutes to walk to the park. What time did they arrive at the park?  
  
**B.** Fern's mom told the children to be home for lunch at 12:30. What time do they need to leave the park to make sure they are home on time?  
  
**C.** How long did Fern and her brothers have to play at the park? Show or tell how you know.  
  
**D.** If Fern and her brothers left the house at 10:20 and arrived home for lunch at 12:30, how long were they gone?
  
3. Bessie Coleman School is having a special night for families. The evening starts at 6:00 with a family dinner. After dinner families will rotate to three different activity stations. They will spend 30 minutes at each activity. If the dinner takes 45 minutes, what time will the evening end? Show or tell how you know.

**Part 7 Problem Solving with Shapes**

1. What is the approximate area of Olga the Oval? \_\_\_\_\_



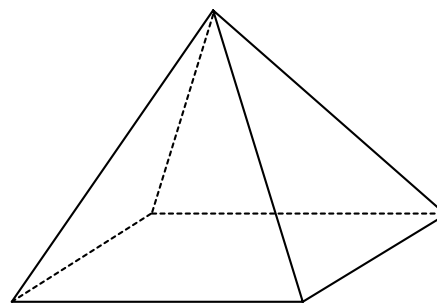
2. Miguel measured the perimeter of a rectangle. Two sides were each 8 centimeters long. The other two sides were each 15 centimeters long. What is the perimeter of the rectangle? Draw a picture and write a number sentence to show how you solved the problem.

3. Look at this shape. Count the number of

A. Vertices \_\_\_\_\_

B. Faces \_\_\_\_\_

C. Edges \_\_\_\_\_



rectangular pyramid

D. Draw and name the shapes of each face.

Home Practice

Part 2. Solve Problems with Addition and Subtraction (TG p. 1)

Questions 1–8

1. 90            2. 70            3. 80  
 4. 18            5. 47            6. 56

7. **A.** Possible response: I know that  $14 - 6 = 8$  so  $140 - 60$  will equal 80.

**B.** Possible response: I know that  $50 + 50 = 100$ . Since this problem is  $53 + \underline{\quad} = 100$ , the answer will be  $50 - 3$ , or 47.

8. **A.** \$1.75

**B.** Possible solutions include:

Quarters	Dimes	Nickles
6	2	1
6	1	3
5	4	2
5	3	4
5	2	6
5	1	8
4	7	1
4	6	3
4	5	5
3	9	2

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**Part 3** Problem Solving with Multiplication and Division

Solve the following problems. Show how you found each answer.

- One Saturday, 37 people volunteer to help restore a prairie. The team leader divides them into teams. He wants each team to have at least 5 people but not more than 8 people. Every person must be on a team. Show or tell all the ways the team leader can divide the group.
- Mrs. Hix is planning for summer camp. Each cabin at the camp can hold 15 campers. There are 12 cabins. If all the cabins are full, how many campers can Mrs. Hix expect at camp? Show or tell how you know.
- A group of 23 campers is going to visit the state capitol. Each car can carry no more than 3 campers. How many cars are needed? Show or tell how you know.
- Some campers are going on a night hike. They will need one adult for every 6 campers who are hiking. If 32 campers sign up for the hike, how many adults will they need? Show or tell how you know.

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**Part 3. Problem Solving with Multiplication and Division (TG p. 2)**

**Questions 1–4**

- There are three ways to divide this group into teams.

Solution 1: 7 teams; 5 teams each with 5 people and 2 teams each with 6 people.

Solution 2: 6 teams; 5 teams each with 6 people and 1 team with 7 people.

Solution 3: 5 teams; 3 teams each with 7 people and 2 teams each with 8 people.

- Possible response: 180 campers; 12 cabins  $\times$  15 campers = 180 campers.
- 8 cars; Possible response: I divided  $23 \div 3 = 7$  R2. That means that there will be 7 cars with 3 campers in each, but there will be two campers left over. Since all the campers are going on the trip, you will need one more car, or 8 cars in all.
- 6 adults. Possible response: I divided  $32 \div 6 = 5$  R2. Since you need one adult for every 6 campers you will need to add one more adult so the 2 leftover campers will be able to go on the hike.

**Part 4. Thinking About Numbers (TG p. 3)**

**Questions 1–4**

- Possible response: I would choose Jar B because it has the most money in it. Jar A has 20 pennies in it because the 2 in 728 is in the 10s place. Jar B has 700 pennies or \$7.00 in it because the 7 is in the 100s place. Jar C has 8 pennies, or 8¢, because the 8 is in the ones place.
- A. Answers will vary. Possible story: Rosa has three bags of marbles. There are 20 marbles in each bag. How many marbles does Rosa have?  
B. Possible response based on the story:  
 $20 \text{ marbles} \times 3 \text{ bags} = 60 \text{ marbles}$
- A. 120 leaves  
B. I thought about 10s and broke the 30 into  $10 + 10 + 10 = 30$ . Then I multiplied  $4 \times 10 + 4 \times 10 + 4 \times 10 = 40 + 40 + 40 = 120$
- A. 54  
B.  $6 \times 9 = 54$

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- A. How many leaves do 30 four-leaf clovers have?

- Show or tell how you solved the problem.

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- Write a number sentence to show how the hopper moves.

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**Part 5. Multiplication Strategies for the 9s (TG p. 4)**

**Questions 1–5**

1. Possible response: If Jason knows that  $2 \times 9 = 18$ , he can double that to solve  $4 \times 9$ :  
 $2 \times 9 + 2 \times 9 = 18 + 18 = 36$ ,  
 so  $4 \times 9 = 36$ .
2. Possible response: To solve  $9 \times 7$ , you can multiply  $10 \times 7 = 70$  and then subtract one group of 7:  $9 \times 7 = 70 - 7 = 63$ .
3. Possible response: If Luis knows  $8 \times 8 = 64$ , he can add one more group of 8 to find  
 $9 \times 8 = 64 + 8 = 72$ .
4. **A.** 45      **B.** 54      **C.** 81
5. **A.**  $10 \times 9 + 4 \times 9 = 90 + 36$   
 $90 + 36 = 126$   
**B.**  $10 \times 9 + 9 \times 9 = 90 + 81$   
 $90 + 81 = 171$   
**C.**  $10 \times 9 + 6 \times 9 = 90 + 54$   
 $90 + 54 = 144$

**Part 6. It is About Time (TG p. 5)**

**Questions 1–3**

1. Moe finished first. Possible response: If Moe finished at 2:22, he ran one mile in 13 minutes. It took Joe 14 minutes to run the mile.
2. **A.** 10:35  
**B.** 12:15  
**C.** 1 hour and 40 minutes; Possible response: Fern and her brothers got to the park at 10:35 and left the park at 12:15. That means they stayed at the park for 1 hour and 40 minutes.  
**D.** 2 hours and 10 minutes.
3. 8:15; Possible response: I used my individual clock. Dinner starts at 6:00 and takes 45 minutes so it ends at 6:45. The three activities each take 30 minutes, so I move the minute hand ahead 30 minutes for each activity, 7:15, 7:45, 8:15. The night ends at 8:15.

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4. Show how to solve these problems.  
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5. Julia uses a break-apart strategy to solve  $13 \times 9$ . She thinks  $10 + 3 = 13$ , so she multiplies:  
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 $90 + 27 = 117$   
 Use Julia's break-apart strategy to solve these problems.  
**A.**  $14 \times 9 =$       **B.**  $19 \times 9 =$       **C.**  $16 \times 9 =$

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**Part 6 It is About Time**

1. Moe and Joe decided to run one mile. They both started to run at 2:09. Joe finished in 14 minutes. Moe finished at 2:22. Who finished first? Show or tell how you know.
2. **A.** Fern took her brothers to the park to play. They left their house at 10:20 am. It took them 15 minutes to walk to the park. What time did they arrive at the park?  
  
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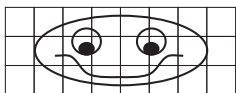
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**Part 7 Problem Solving with Shapes**

1. What is the approximate area of Olga the Oval? \_\_\_\_\_



2. Miguel measured the perimeter of a rectangle. Two sides were each 8 centimeters long. The other two sides were each 15 centimeters long. What is the perimeter of the rectangle? Draw a picture and write a number sentence to show how you solved the problem.

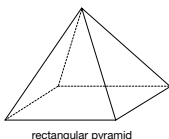
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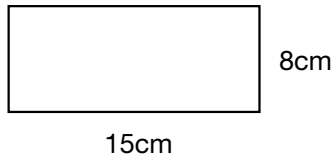


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**Part 7. Problem Solving with Shapes (TG p. 6)**

**Questions 1–3**

1. about 10 square centimeters
2. 46 centimeters;  $8 + 8 + 15 + 15 = 46$



3. A. 5
- B. 5
- C. 8
- D. 1 rectangle and 4 triangles are needed for the faces of the rectangular prism.



Rectangle



Triangle