

Unit 9: Home Practice

Part 1 Triangle Flash Cards: Square Numbers

Study for the quiz on the division facts for the square numbers. Take home your Triangle Flash Cards and your list of facts you need to study.

Here's how to use the flash cards. Ask a family member to choose one flash card at a time. Your partner should cover one of the smaller numbers. (One of the smaller numbers is in a circle. The other number is in a square.) Solve a division fact using the two uncovered numbers.

Your teacher will tell you when the quiz on the square numbers will be. Remember to concentrate on one small group of facts each night. Also, remember to concentrate on those facts you cannot answer correctly and quickly.

Part 2 Mental Problem Solving

Use mental math to solve Questions 1–3. Be ready to show or tell how you solved them.

1. **A.** Paper towels cost 80¢. How much will 6 rolls cost? _____
- B.** One ice cream bar costs \$3.50. How much will 4 bars cost? _____
- C.** Bagels cost 69¢ each. About how much will 5 bagels cost? _____

2. How much is:
 - A.** 11 nickels? _____
 - B.** 11 nickels and 5 dimes? _____

3. Do not find an exact answer for Questions 3A–3C.
 - A.** The product of 2×37 will have how many digits? _____
 - B.** The product of 4×492 will have how many digits? _____
 - C.** The product of 7×88 will have how many digits? _____
 - D.** Explain how you found your answer for Question 3C.

Part 3 Addition, Subtraction, and Multiplication

1. Find the missing numbers needed to make these addition and subtraction problems correct. Use pencil and paper or mental math.

A.
$$\begin{array}{r} 189 \\ + \\ \hline 612 \end{array}$$

B.
$$\begin{array}{r} 322 \\ - \\ \hline 284 \end{array}$$

C.
$$\begin{array}{r} 5078 \\ + \\ \hline 8079 \end{array}$$

D.
$$\begin{array}{r} 7339 \\ - \\ \hline 6079 \end{array}$$

E.
$$\begin{array}{r} 5405 \\ + \\ \hline 13,053 \end{array}$$

F.
$$\begin{array}{r} 3000 \\ - \\ \hline 1456 \end{array}$$

2. Estimate the following products using convenient numbers. Write a number sentence to show your thinking.

A. $290 \times 18 =$

B. $505 \times 59 =$

C. $9956 \times 9 =$

3. Find the products using paper and pencil or mental math. Be sure to estimate to make sure your answers are reasonable.

A. $63 \times 4 =$

B. $37 \times 8 =$

C. $28 \times 9 =$

D. $842 \times 5 =$

E. $667 \times 3 =$

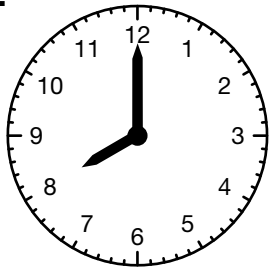
F. $725 \times 6 =$

4. Choose one problem from Question 3 and show or tell how you can solve it using mental math.

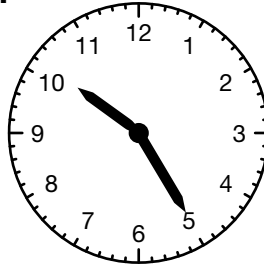
Part 4 Time

1. What time is shown on each clock below?

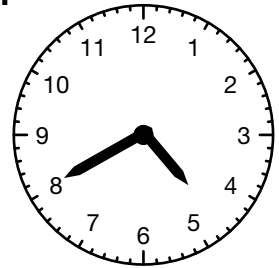
A.



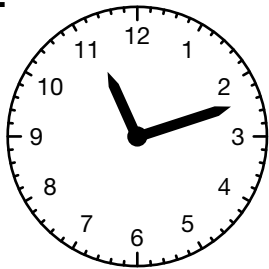
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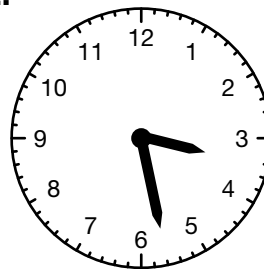
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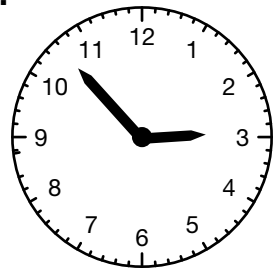
D.



E.



F.



2. A. Jackie began cleaning her room at 6:15 P.M. She finished two hours later. When did she finish?

- B. John started watching cartoons when he woke up 1 hour and 15 minutes ago. It is now 10:00 A.M. What time did John wake up?

- C. Jacob's mother has to pick him up from his aunt's house at 9:30 P.M. It takes 50 minutes to get there. What time should she leave her home?

- D. Irma and her sister are making dinner for the family. They plan to eat at 6:30 P.M. The dinner takes 2 hours and 35 minutes to prepare. What time should they begin cooking?

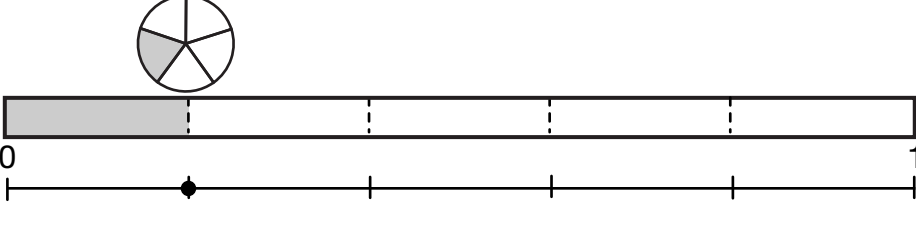
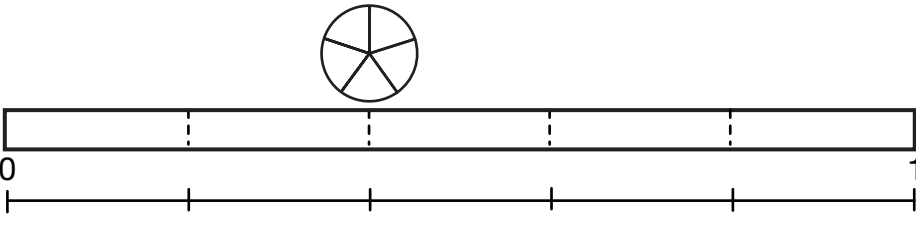
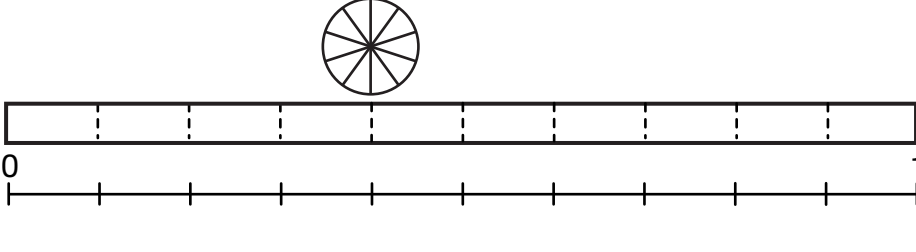
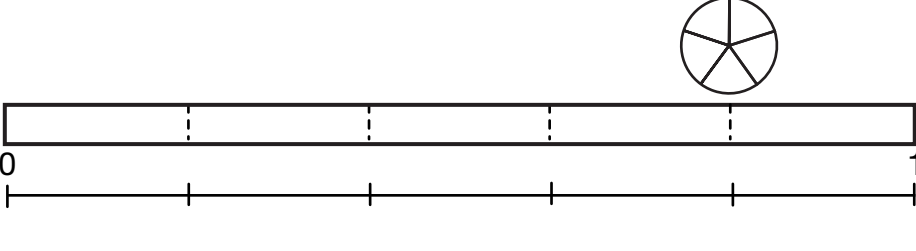
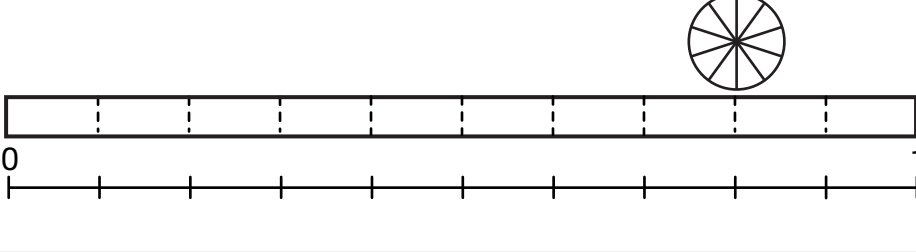
- E. How many minutes will it take Irma and her sister to prepare dinner?

- F. How many hours is 600 minutes?

- G. Which clock in Question 1 shows an acute angle?

Part 5 Showing Fractions

Show the numbers in the first column in three ways. Use circles, fraction strips, and number lines. Draw the circle in the space above the fraction strip. The whole circle and rectangle represent unit wholes. For number lines, the segment from 0 to 1 is the unit whole.

Number	Representations
<p>Example</p> <p>$\frac{1}{5}$</p>	
<p>A.</p> <p>$\frac{2}{5}$</p>	
<p>B.</p> <p>$\frac{4}{10}$</p>	
<p>C.</p> <p>$\frac{4}{5}$</p>	
<p>D.</p> <p>$\frac{8}{10}$</p>	
<p>E. What do you notice about your answers to A and B? What do you notice about your answers to C and D?</p>	

Part 6 Making Rectangles With Tiles

- Fill in the table to show all the different rectangles that can be made with 64 tiles. You can use a calculator or multiplication facts to help you divide.
- List all the factors of 64.

Number of Rows	Number in Each Row	Division Sentence
1	64	$64 \div 1 = 64$
2		$64 \div 2 =$

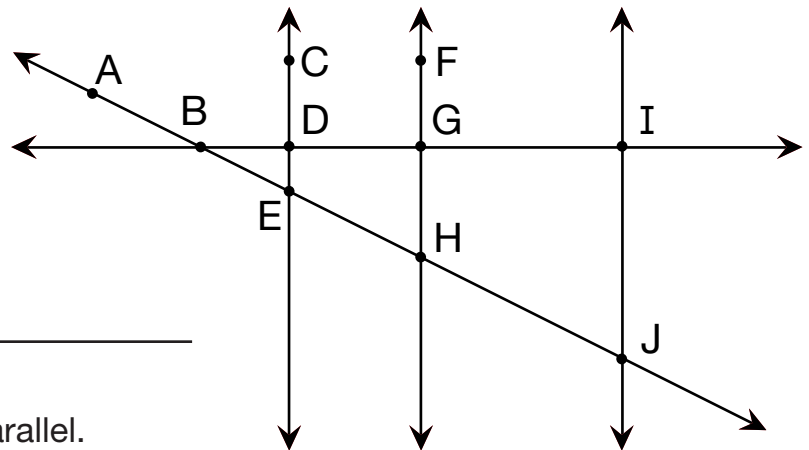
Part 7 What's My Line?

- Name a triangle.

- Name 2 quadrilaterals.

- Name 2 lines that are parallel.

- Name 2 lines that are perpendicular. _____
- Name the point where your two perpendicular lines intersect. _____
- Name one ray. _____
- Name one line segment. _____



Name _____ Date _____

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- How much is:
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Part 3 Addition, Subtraction, and Multiplication

- Find the missing numbers needed to make these addition and subtraction problems correct. Use pencil and paper or mental math.

A. 189 + 612	B. 322 - 284	C. 5078 + 8079
D. 7339 - 6079	E. 5405 + 13,053	F. 3000 - 1456
- Estimate the following products using convenient numbers. Write a number sentence to show your thinking.

A. $290 \times 18 =$	B. $505 \times 59 =$	C. $9956 \times 9 =$
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- Find the products using paper and pencil or mental math. Be sure to estimate to make sure your answers are reasonable.

A. $63 \times 4 =$	B. $37 \times 8 =$	C. $28 \times 9 =$
D. $842 \times 5 =$	E. $667 \times 3 =$	F. $725 \times 6 =$
- Choose one problem from Question 3 and show or tell how you can solve it using mental math.

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Part 2. Mental Problem Solving (TG p. 1)

Questions 1–3

- One possible explanation is shown for each.
 - $\$4.80; 6 \times 80¢ = \4.80
 - $\$14; 4 \times \$3 = \$12; 4 \times 50¢ = \$2.00; \$2 + \$12 = \$14$
 - about $\$3.50; 5 \times 70¢ = \3.50
- 55¢
 - \$1.05
- 2 digits
 - 4 digits
 - 3 digits
 - Possible response: $7 \times 90 = 630$, and 7×88 will have the same number of digits in the product.

Part 3. Addition, Subtraction, and Multiplication (TG p. 2)

Questions 1–4

- | | | |
|---------|---------|---------|
| A. 423 | B. 38 | C. 3001 |
| D. 1260 | E. 7648 | F. 1544 |
- Answers will vary. Possible answers include:
 - $300 \times 20 = 6000$
 - $500 \times 60 = 30,000$
 - $10,000 \times 9 = 90,000$
- | | | |
|---------|---------|---------|
| A. 252 | B. 296 | C. 252 |
| D. 4210 | E. 2001 | F. 4350 |
- Possible response for D:
 $842 \times 10 = 8420$
 Half of 8420 = 4210
 Possible response for F:
 $700 \times 6 = 4200$
 $25 \times 6 = 150$
 $4200 + 150 = 4350$

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Part 4. Time (TG p. 3)

Questions 1–2

- | | |
|------------|-----------------|
| 1. A. 8:00 | 2. A. 8:15 P.M. |
| B. 10:25 | B. 8:45 A.M. |
| C. 4:40 | C. 8:40 P.M. |
| D. 11:12 | D. 3:55 P.M. |
| E. 3:28 | E. 155 min. |
| F. 2:53 | F. 10 hours |
| | G. Clock E |

Name _____ Date _____

Part 4 Time

1. What time is shown on each clock below?

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B.

C.

D.

E.

F.

2. A. Jackie began cleaning her room at 6:15 P.M. She finished two hours later. When did she finish?

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G. Which clock in Question 1 shows an acute angle?

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Part 5. Showing Fractions (TG p. 4)

Questions A–E

Number	Representations
Example $\frac{1}{5}$	
A. $\frac{2}{5}$	
B. $\frac{4}{10}$	
C. $\frac{4}{5}$	
D. $\frac{8}{10}$	
E.	$\frac{2}{5}$ is equivalent to $\frac{4}{10}$ and $\frac{4}{5}$ is equivalent to $\frac{8}{10}$.

Name _____ Date _____

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C. $\frac{4}{5}$	
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E.	What do you notice about your answers to A and B? What do you notice about your answers to C and D?

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2. List all the factors of 64.

Part 7 What's My Line?

1. Name a triangle. _____

2. Name 2 quadrilaterals. _____

3. Name 2 lines that are parallel. _____

4. Name 2 lines that are perpendicular. _____

5. Name the point where your two perpendicular lines intersect. _____

6. Name one ray. _____

7. Name one line segment. _____

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Part 6. Making Rectangles With Tiles (TG p. 5)

Questions 1–2

1.

Number of Rows	Number in Each Row	Division Sentence
1	64	$64 \div 1 = 64$
2	32	$64 \div 2 = 32$
4	16	$64 \div 4 = 16$
8	8	$64 \div 8 = 8$

2. 1, 2, 4, 8, 16, 32, 64

Part 7. What's My Line? (TG p. 5)

Questions 1–7

- Possible responses: BDE, BGH, BIJ
- Possible responses: DGHE, GIHJ, DIJE
- Possible responses: \overline{CE} , \overline{FH} , \overline{IJ}
- Possible responses: \overline{BI} is perpendicular to \overline{CE} , \overline{FH} , and \overline{IJ} .
- Depending on answer to Question 4, possible points are D, G, and I.
- 6–7. There are numerous rays and line segments. Check to see that students represent them correctly, e.g., \overrightarrow{HJ} for a ray and \overline{HJ} for a line segment.