Measuring Fingers

Home Link 8-1

NAME DATE TIME

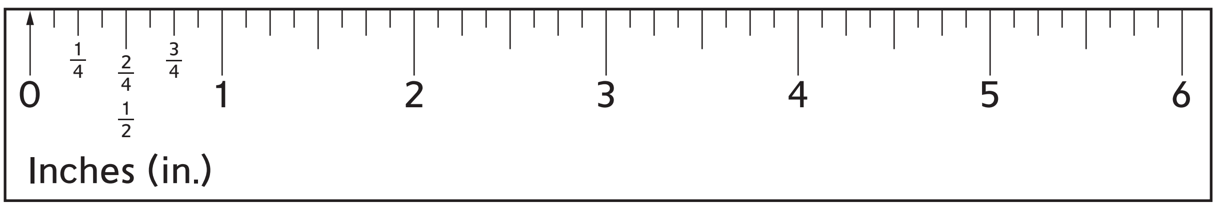
Family Note Today your child measured objects to the nearest $\frac{1}{4}$ inch by using $\frac{1}{8}$-inch markings on a ruler to determine which $\frac{1}{4}$-inch mark was closer to the end of the object. When measuring an item, if one end is lined up with the 0 mark and the other end is to the right of the $\frac{1}{8}$-inch mark, the measure is rounded to the next larger $\frac{1}{4}$ inch. If the end of the item is to the left of the $\frac{1}{8}$-inch mark, the measure is rounded to the next smaller $\frac{1}{4}$ inch. Help your child trace his or her hand and use the $\frac{1}{8}$-inch marks on the ruler to measure finger lengths to the nearest $\frac{1}{4}$ inch.

Please return this Home Link to school tomorrow.

SRB 171-172

1. Cut out the ruler below. Carefully trace around one of your hands in the space below. Measure the length of each traced finger to the nearest $\frac{1}{4}$ inch. Write the measurement on each finger. Remember to record the unit.

2. Have someone at home trace his or her hand on the back of this page. Measure the lengths of the traced fingers to the nearest $\frac{1}{4}$ inch. Write the measurements above each finger.



Extended Facts: Multiplication and Division

Home Link 8-2

NAME DATE TIME

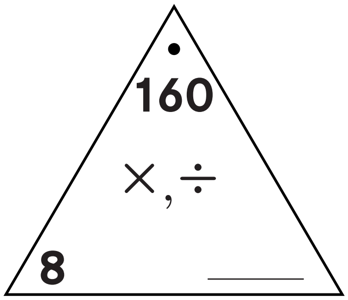
Family Note Today your child learned to use basic multiplication facts, such as 4 × 6 = 24, to solve extended multiplication facts, such as 4 × 60, by thinking of groups of ten. For example, 4 × 60 can be thought of as 4 × 6 [10s]. If you know that 4 × 6 = 24, then you also know that 4 × 6 [10s] = 24 [10s] or 240. The same approach works for extended division facts like 120 ÷ 3 = 40. If you know that 12 ÷ 3 = 4, then you also know that 12 [10s] ÷ 3 = 4 [10s] or 40. The extended Fact Triangles below work the same way as the basic Fact Triangles.

Please return this Home Link to school tomorrow.

Fill in the extended Fact Triangles. Write the extended fact families.

SRB 57

①



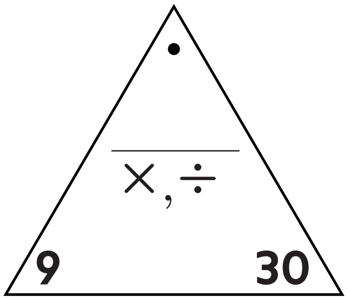
____ × ____ = ____

____ × ____ = ____

____ ÷ ____ = ____

____ ÷ ____ = ____

②



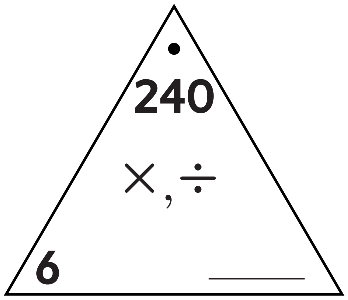
____ × ____ = ____

____ × ____ = ____

____ ÷ ____ = ____

____ ÷ ____ = ____

③



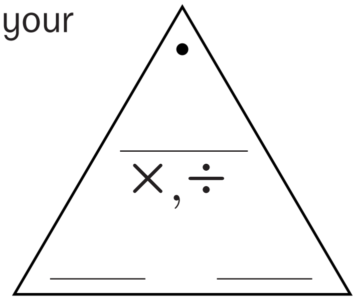
____ × ____ = ____

____ × ____ = ____

____ ÷ ____ = ____

____ ÷ ____ = ____

④ Write your own.



____ × ____ = ____

____ × ____ = ____

____ ÷ ____ = ____

____ ÷ ____ = ____

Factor Pairs

Home Link 8-3

NAME DATE TIME

Family Note Today your child found factor pairs for numbers by using basic facts, pictures, and arrays. For example, 2 and 8 are a factor pair for 16 because $2 \times 8 = 16$.

Please return this Home Link to school tomorrow.

Use facts, counters, or drawings to help you solve the problems.

SRB 65-66

1. The third-grade class is putting on a play. They have 18 chairs for the audience. Jayla and Kevin are in charge of arranging the chairs in equal rows with no chairs left over.

   Describe ways that Jayla and Kevin can arrange the chairs.

   ____

   ____

   List two factor pairs for 18:

   ______ × ______ = 18

   ______ × ______ = 18

   How does knowing ways to arrange 18 chairs in equal rows help you find factors of 18?

   ____

   ____

2. 40 = ______ × ______ 40 = ______ × ______

3. 72 = ______ × ______ 72 = ______ × ______

Try This

4. 150 = ______ × ______ 150 = ______ × ______

Making Conjectures and Arguments

Home Link 8-4

NAME DATE TIME

Family Note Today your child learned how conjectures and arguments are related. In mathematics, a **conjecture** is a statement that is thought to be true, and an **argument** is the mathematical reasoning used to show whether a conjecture is true or false. In the problem below, children are asked to find two different ways band members can be arranged for marching. Then they are asked to choose which arrangement they think is better. When children are asked to explain the reasoning for their choice, they are being asked to make an argument. Encourage your child to show the mathematical reasoning he or she used in the explanation for which arrangement is better.

Please return this Home Link to school tomorrow.

SRB 12-14

1. There are 24 members in the school band. The band director wants them to march in rows with the same number of band members in each row. Find two different ways that the band members can be arranged. Draw a sketch that shows each arrangement.

2. Which way do you think is better? Explain your reasoning.

Factor Bingo

Home Link 8-5

NAME DATE TIME

Family Note Today your child learned to play *Factor Bingo* to practice identifying factors of products. When the circled products on the game mat form a row, column, or diagonal, your child can call *Bingo!*

Please return this Home Link to school tomorrow.

SRB 240-241

Look for a product for each factor in the table below on the *Factor Bingo* game mat. Circle the product on the game mat and record it next to the factor in the table. You can only use each product on the game mat one time. Explain to someone at home how you chose that product. For example, 2 is a factor of 6 because 2 × 3 equals 6. Call out *Bingo!* if you get five products in a row, column, or diagonal.

Factor	Product
2	6
5	______
3	______
10	______
4	______
7	______
3	______
2	______
9	______
5	______
4	______
8	______

Factor Bingo **Game Mat**

10	8	11	24	23
38	40	6	35	27
21	20	15	90	75
28	17	31	36	45
16	12	18	9	60

Sharing Money with Friends

Home Link 8-6

NAME DATE TIME

Family Note Today your child modeled equal sharing by distributing money amounts into equal groups. Equal sharing is one way to think about division. Work with more formal division algorithms will begin in *Fourth Grade Everyday Mathematics.* In the meantime, encourage your child to solve the following problems in his or her own way and to explain the strategy to you. Have your child model these problems with play money or with slips of paper labeled $10 and $1.

Please return this Home Link to school tomorrow.

1. Four friends share $76. They have seven $10 bills and six $1 bills. They can go to the bank to get smaller bills.

SRB 40

The letter _______ represents ______________________________________.

____
(number model with letter)

Use numbers or pictures to show how you solved the problem:

Answer: Each friend gets a total of $_______.

Model each sharing problem below. Record your answer.

2. $\$48 \div 3 = \$$_______

3. $\$56 \div 4 = \$$_______

Try This

4. Without calculating, explain how you know that $\$90 \div 5$ would be larger than $\$90 \div 6$.

____

____

____

Locating Fractions

Home Link 8-7

NAME DATE TIME

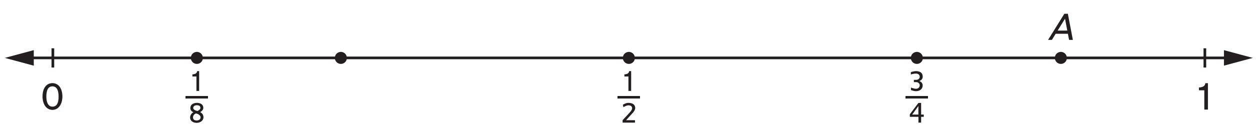
Family Note Today your child located and plotted fractions on a number line. To plot fractions accurately, children applied their understanding of fraction locations as a distance from 0 to an end point. They also made comparisons to 0, $\frac{1}{2}$, and 1 and used equivalence to place fractions. Ask your child to explain how he or she placed the fractions below on the number line.

Please return this Home Link to school tomorrow.

① Fill in the missing fractions on the number line. Choose from the fractions in the box below.

SRB 140

$\frac{1}{3}, \frac{7}{8}, \frac{1}{4}, \frac{5}{6}, \frac{6}{8}$



______ ______

② Explain how you placed fraction *A* on the number line.

____

____

____

Practice

③ $4 \times 7 =$ ______

④ ______ $= 6 \times 8$

⑤ $49 \div 7 =$ ______

⑥ ______ $= 56 \div 7$

Making a Prism

Home Link 8-8

NAME DATE TIME

Family Note Today your child explored attributes of prisms. The pattern on this page can be used to make a prism. Prisms are named for the shape of their bases.

Please return this Home Link to school tomorrow.

SRB 219

Cut on the dashed lines. Fold on the dotted lines. Tape or paste each TAB inside or outside the shape.

Discuss the following questions with someone at home.

1. What shapes are the bases? ____________________
2. What shapes are the other faces? ____________________
3. How many faces are there that are not bases? ______
4. What is this 3-dimensional shape called? Remember that prisms are named for the shape of their bases. ____________________