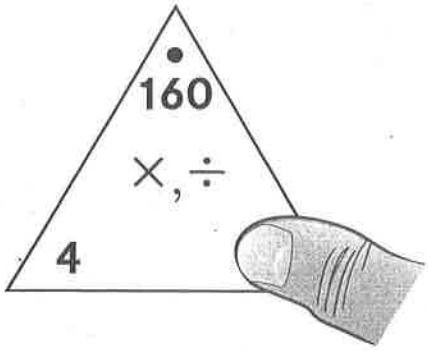
Solving Extended Division Facts

Home Link 6-1

NAME DATE TIME

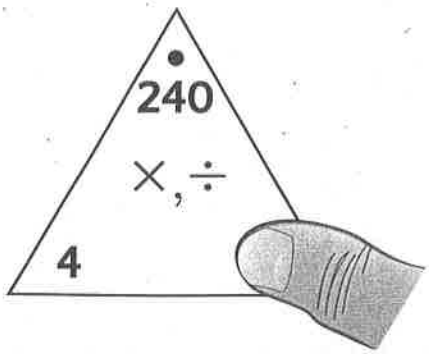
Write a basic division fact and an extended division fact for each Fact Triangle.

SRB 110

① 

Basic fact: 16 ÷ 4 = _____

Extended fact: 160 ÷ 4 = _____

② 

Basic fact: _____

Extended fact: _____

Solve.

③ **a.** 25 ÷ 5 _____

b. 250 ÷ 5 = _____

c. 2,500 ÷ 5 = _____

d. 250 ÷ 50 = _____

④ **a.** 36 ÷ 4 = _____

b. 360 ÷ 4 = _____

c. 3,600 ÷ 4 = _____

d. 360 ÷ 40 = _____

⑤ **a.** 18 ÷ 9 = _____

b. 180 ÷ 9 = _____

c. 1,800 ÷ 9 = _____

d. 180 ÷ 90 = _____

⑥ **a.** 42 / 7 = _____

b. 420 / 7 = _____

c. 4,200 / 7 = _____

d. 420 / 70 = _____

Practice

⑦ 456 * 5 = _____

⑧ 720 * 8 = _____

⑨ 905 * 7 = _____

Finding the Unknown Side Length

Home Link 6-2

NAME DATE TIME

SRB 111-112, 204

Solve.

① 2 meters | *s* | 60 square meters

How long is the unknown side *s*?

Equation with unknown: _____

Answer: _____ meters

② 6 meters | *t* | 420 square meters

What is the length of the unknown side *t*?

Equation with unknown: _____

Answer: _____ meters

③ Fill in the unknown information about some rectangular rooms in a museum.

Room	Length in Yards	Width in Yards	Area in Square Yards
A	6		18
B		8	56
C	9	5	
D		9	90

④ A store is rectangular in shape with an area of 2,700 square feet. It has a length of 90 feet. How wide is it?

Equation with unknown: _____

Answer: _____ feet

Practice

⑤ 420 ÷ 7 = _____ ⑥ _____ = 3,600 / 6 ⑦ 5,400 ÷ 90 = _____

Solving Division Number Stories

Home Link 6-3

NAME DATE TIME

SRB 55, 110, 114

Fill in the lists of multiples to help you, if needed.

(1) Rosario sells bicycle wheels in packages of 2. If a store orders 46 wheels, how many packages will she send?

20 [2s] = _____ Number model with unknown: _____

21 [2s] = _____ Answer: _____ packages

22 [2s] = _____ Number model with answer: _____

23 [2s] = _____

24 [2s] = _____

25 [2s] = _____

(2) Doug is placing apples in bags for a picnic. He can fit 6 apples in a bag. If he has 92 apples, how many bags will he need?

10 [6s] = _____ Number model with unknown: _____

11 [6s] = _____ Answer: _____ bags

12 [6s] = _____ Number model with answer: _____

13 [6s] = _____

14 [6s] = _____

15 [6s] = _____

16 [6s] = _____

17 [6s] = _____

18 [6s] = _____

Practice

(3) 82 * 10 = _____ (4) _____ = 25 * 30 (5) 333 * 3 = _____

Partial-Quotients Division

Home Link 6-4

NAME DATE TIME

Family Note In this lesson students are introduced to the partial-quotients method, in which a number is divided in a series of steps. The quotients for each step (called partial quotients) are added to give the final answer. For example, to divide 96 by 6, students use extended multiplication facts such as $6 * \mathbf{10} = 60$ to find the partial quotient. Then with the remaining 36, they use an "easy" multiplication fact, $6 * \mathbf{6}$, to finish solving the problem. These two partial quotients are added together, $10 + 6$, to find the exact quotient of 16. So $96 \div 6 = 16$.

Estimate. Write a number model with an unknown to represent the problem. Then solve using partial quotients.

SRB 47, 111-114

(1) Jordan has 3 Great Dane puppies. At 6 weeks old, their combined weight is 48 pounds. Assuming that they all weigh about the same amount, how much does each puppy weigh?

Estimate: _____

Number model with unknown: _____

Answer: _____ pound(s)

(2) Four sisters love barrettes. They have a value pack that contains 92 barrettes. How many barrettes can each sister have if they share equally?

Estimate: _____

Number model with unknown _____

Answer: _____ barrette(s)

Practice

Name two equivalent fractions for each fraction given.

(3) $\frac{1}{2}$ _____ _____ (4) $\frac{1}{3}$ _____ _____ (5) $\frac{25}{100}$ _____ _____ (6) $\frac{6}{8}$ _____ _____

Assigning People to Buses

Home Link 6-5

NAME DATE TIME

SRB 113-115

Mr. Atkins is organizing the 4th- and 5th-grade field trip to the science museum. He asked his students to help him figure out which students and teachers should go on each bus. The number of students in each class is shown in the table below:

Mr. Atkins's 4th-grade class	31 students
Ms. Smith's 4th-grade class	28 students
Mr. Bates's 5th-grade class	29 students
Mrs. Gonzales's 5th-grade class	27 students

Important information:

- 4 buses have been ordered.
- The maximum number of passengers is 30 per bus.
- Each bus must have 1 teacher.

Cary said he solved the problem this way:

115 / 4 is 28 with a remainder of 3.

① What do the numbers in his sentence mean?

② Which students and teachers should go on each bus? Explain why.

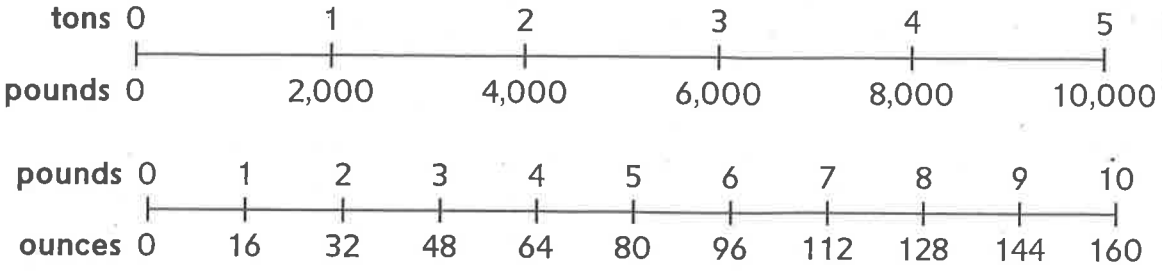
Practice

③ $\frac{3}{8} + \frac{4}{8} =$ ____ ④ $\frac{5}{6} + \frac{3}{6} =$ ____ ⑤ $\frac{4}{5} - \frac{2}{5} =$ ____ ⑥ $\frac{7}{10} - \frac{3}{10} =$ ____

Converting Units of Weight

Home Link 6-6

NAME DATE TIME



SRB 190-192

Use the measurement scales to help you solve the problems.

①

Tons	Pounds
1	2,000
6	
	14,000
8	
	22,000

②

Pounds	Ounces
1	16
5	
9	
	160
15	

③ The army chef is ordering food for the troops. She ordered 2 tons of rice, 1 ton of pasta, and 1 ton of flour. How many pounds of food did she order?

Answer: _____ pound(s)

④ Potatoes come in 8-pound bags. How many ounces do 12 bags weigh?

Answer: _____ ounce(s)

Practice

⑤ $\frac{4}{8} + \frac{3}{8} =$ ____ ⑥ ____ $= \frac{5}{8} - \frac{3}{8}$ ⑦ ____ $= \frac{5}{10} + \frac{3}{100}$ ⑧ $\frac{60}{100} + \frac{4}{10} =$ ____