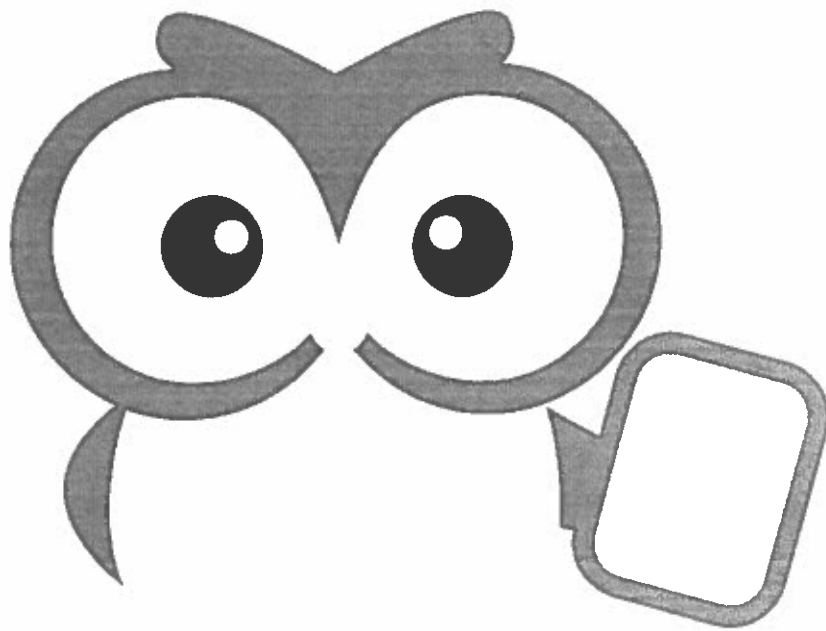


Unit 6

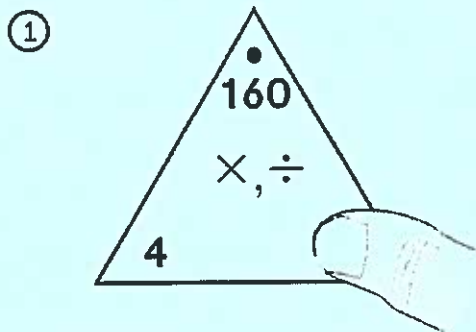
Homelink Packet



Solving Extended Division Facts

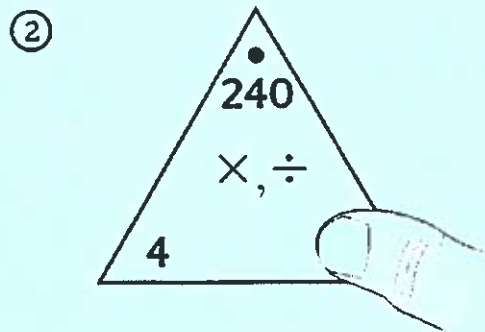


Write a basic division fact and an extended division fact for each Fact Triangle.



Basic fact: $16 \div 4 =$ _____

Extended fact: $160 \div 4 =$ _____



Basic fact: _____

Extended fact: _____

Solve.

- ③
- a. $25 \div 5 =$ _____
 - b. $250 \div 5 =$ _____
 - c. $2,500 \div 5 =$ _____
 - d. $250 \div 50 =$ _____

- ⑤
- a. $18 \div 9 =$ _____
 - b. $180 \div 9 =$ _____
 - c. $1,800 \div 9 =$ _____
 - d. $180 \div 90 =$ _____

- ④
- a. $36 \div 4 =$ _____
 - b. $360 \div 4 =$ _____
 - c. $3,600 \div 4 =$ _____
 - d. $360 \div 40 =$ _____

- ⑥
- a. $42 \div 7 =$ _____
 - b. $420 \div 7 =$ _____
 - c. $4,200 \div 7 =$ _____
 - d. $420 \div 70 =$ _____

Practice

Show your work.

⑦ $456 \times 5 =$ _____

⑧ $720 \div 8 =$ _____

⑨ $905 \times 7 =$ _____

Solve each problem. Show all of your work.

Mr. and Mrs. Flint are building a new house. They have set aside \$20,000 to buy appliances and furniture. Below is a list of the appliances they have purchased. How much money will they have left to buy furniture?

refrigerator - \$1,600

oven - \$1,450

dishwasher - \$775

washer - \$1,530

dryer - \$1,388

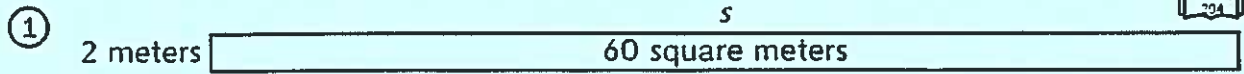
Mr. and Mrs. Flint are buying new carpeting for their bedroom. They need to calculate the area of the room to order the carpet. Mrs. Flint measured and found the length of the room is 23 feet and the width is 18 feet. What is the area of the bedroom?

Finding the Unknown Side Length

Home Link 6-2		
NAME _____	DATE _____	TIME _____



Solve.



How long is the unknown side s ?

Equation with unknown: _____

Answer: _____ 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 $420 \div 7 =$ _____ ⑥ _____ $= 3,600 / 6$ ⑦ $5,400 \div 90 =$ _____

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Complete each conversion table.

Feet	Inches
6	
	96
20	
	600
70	

Meters	Centimeters
4	
36	
8.7	
	1,300
	870

Liters	Milliliters
	2,000
7	
19	
	4,500
9.32	

Feet	Yards
9	
75	
	40
240	
	240

Solving Division Number Stories

Home-Link 6-3		
NAME	DATE	TIME

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 $82 \div 10 =$ _____

④ _____ $= 25 \div 30$

⑤ $333 \div 3 =$ _____

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$4\sqrt{32} \quad 7\sqrt{56} \quad 6\sqrt{42} \quad 5\sqrt{45} \quad 6\sqrt{48} \quad 8\sqrt{64} \quad 5\sqrt{30} \quad 6\sqrt{54} \quad 9\sqrt{54} \quad 5\sqrt{35}$

$7\sqrt{49} \quad 7\sqrt{63} \quad 8\sqrt{48} \quad 8\sqrt{72} \quad 9\sqrt{81} \quad 4\sqrt{36} \quad 9\sqrt{72} \quad 8\sqrt{56} \quad 6\sqrt{36} \quad 7\sqrt{42}$

$4\sqrt{24} \quad 5\sqrt{40} \quad 4\sqrt{28} \quad 9\sqrt{63} \quad 8\sqrt{56} \quad 4\sqrt{36} \quad 9\sqrt{72} \quad 6\sqrt{48} \quad 6\sqrt{36} \quad 8\sqrt{64}$

$7\sqrt{63} \quad 7\sqrt{56} \quad 5\sqrt{40} \quad 9\sqrt{54} \quad 9\sqrt{63} \quad 7\sqrt{42} \quad 4\sqrt{24} \quad 7\sqrt{49} \quad 5\sqrt{35} \quad 6\sqrt{42}$

$8\sqrt{72} \quad 8\sqrt{48} \quad 4\sqrt{32} \quad 5\sqrt{30} \quad 6\sqrt{54} \quad 4\sqrt{28} \quad 9\sqrt{81} \quad 5\sqrt{45} \quad 9\sqrt{81} \quad 4\sqrt{32}$

Partial-Quotients Division

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 $6 * 10 = 60$ to find the partial quotient. Then with the remaining 36, they use an "easy" multiplication fact, $6 * 6$, 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.



- 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 $\frac{6}{8}$ _____

Decompose these fractions two different ways.

Fraction	One Way	Another Way
$\frac{5}{7}$		
$\frac{4}{9}$		
$\frac{3}{5}$		
$\frac{8}{9}$		
$\frac{12}{17}$		

Assigning People to Buses

Home Link 6-5

NAME _____

DATE _____

TIME _____

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

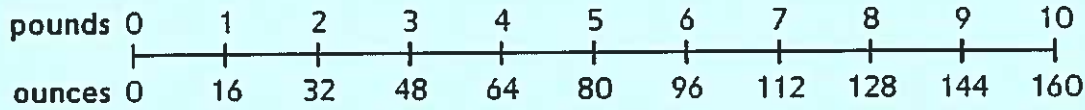
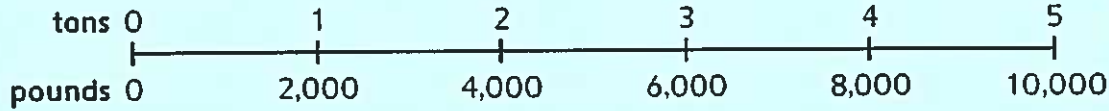
Converting Units of Weight

Home-Link 6-6

NAME _____

DATE _____

TIME _____



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 _____ $= \frac{5}{10} + \frac{3}{10}$ ⑧ $\frac{60}{100} + \frac{4}{10} =$ _____

Name all the factors of each number. Then circle whether the number is prime or composite.

45: _____

prime or composite

53: _____

prime or composite

70: _____

prime or composite

63: _____

prime or composite

29: _____

prime or composite

Partial Quotients

Estimate. Write a number model to represent the problem. Solve using partial quotients.



- ① The carnival committee has 360 small prizes to distribute to 5 booths. How many prizes will each booth get?

Estimate: _____

Number model with unknown:

- ② The mall needs a row of parking spaces. The length of the parking area is 2,711 feet. If each parking space is 9 feet wide, how many spaces will there be?

Estimate: _____

Number model with unknown:

Answer: _____ prizes

Answer: _____ spaces

How many prizes are left over? _____ prizes

How many feet are left over? _____ feet

Solve using partial quotients. Show your work on the back of this page.

- ③ $161 / 7$ Estimate: _____

Answer: _____

- ④ $576 / 4$ Estimate: _____

Answer: _____

Practice

Put these decimals in order from least to greatest.

- ⑤ 0.98, 0.34, 9.8, 0.08 _____, _____, _____, _____

- ⑥ 0.11, 0.01, 0.10, 1.0 _____, _____, _____, _____

Use $<$, $>$, or $=$ to compare the decimals.

- ⑦ 0.65 _____ 0.5

- ⑧ 37.9 _____ 37.96

3.

4.

$$\begin{array}{r} 14 \\ - 8 \\ \hline \end{array}$$

$$\begin{array}{r} 15 \\ - 6 \\ \hline \end{array}$$

$$\begin{array}{r} 15 \\ - 8 \\ \hline \end{array}$$

$$\begin{array}{r} 14 \\ - 8 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ - 5 \\ \hline \end{array}$$

$$\begin{array}{r} 15 \\ - 8 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ - 7 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \\ - 8 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ - 4 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ - 5 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \\ - 8 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ - 4 \\ \hline \end{array}$$

$$\begin{array}{r} 16 \\ - 7 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \\ - 9 \\ \hline \end{array}$$

$$\begin{array}{r} 15 \\ - 9 \\ \hline \end{array}$$

$$\begin{array}{r} 16 \\ - 7 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \\ - 5 \\ \hline \end{array}$$

$$\begin{array}{r} 17 \\ - 9 \\ \hline \end{array}$$

$$\begin{array}{r} 15 \\ - 7 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ - 7 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ - 4 \\ \hline \end{array}$$

$$\begin{array}{r} 14 \\ - 9 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ - 6 \\ \hline \end{array}$$

$$\begin{array}{r} 18 \\ - 9 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ - 4 \\ \hline \end{array}$$

$$\begin{array}{r} 15 \\ - 7 \\ \hline \end{array}$$

$$\begin{array}{r} 15 \\ - 9 \\ \hline \end{array}$$

$$\begin{array}{r} 15 \\ - 6 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ - 6 \\ \hline \end{array}$$

$$\begin{array}{r} 14 \\ - 9 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \\ - 5 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ - 5 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \\ - 4 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \\ - 7 \\ \hline \end{array}$$

$$\begin{array}{r} 17 \\ - 8 \\ \hline \end{array}$$

Interpreting Remainders

Home Link 6-8

NAME _____

DATE _____

TIME _____

- ① Mrs. Patel brought a box of 124 strawberries to the party. She wants to divide the strawberries evenly among 8 people. How many strawberries will each person get?

- ② Mr. Chew has a box of 250 pens. He asks Maurice to divide the pens into groups of 8. How many groups can Maurice make?



Number model with unknown:

Answer:

_____ strawberries

Number model with answer:

What did you do about the remainder?

Circle the answer.

- A. Ignored it
- B. Reported it as a fraction
- C. Rounded the answer up

Why? _____

Number model with unknown:

Answer:

_____ groups

Number model with answer:

What did you do about the remainder?

Circle the answer.

- A. Ignored it
- B. Reported it as a fraction
- C. Rounded the answer up

Why? _____

Practice

Order the fractions from smallest to largest.

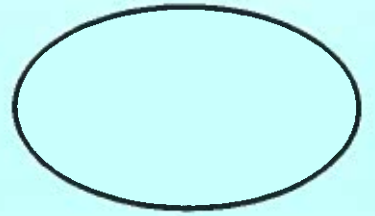
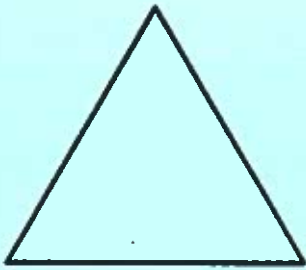
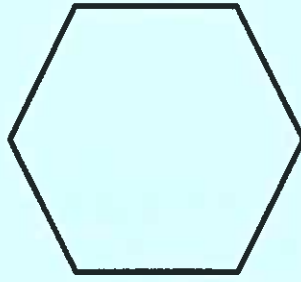
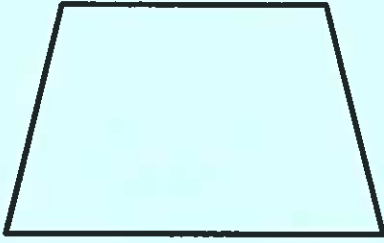
③ $\frac{3}{6}, \frac{3}{3}, \frac{3}{5}, \frac{3}{8}$ _____, _____, _____, _____

④ $\frac{1}{4}, \frac{1}{8}, \frac{1}{2}, \frac{1}{5}$ _____, _____, _____, _____

⑤ $\frac{2}{3}, \frac{1}{2}, \frac{6}{8}, \frac{99}{100}$ _____, _____, _____, _____

⑥ $\frac{4}{5}, \frac{81}{100}, \frac{4}{6}, \frac{2}{10}$ _____, _____, _____, _____

Draw all the lines of symmetry in each shape below.



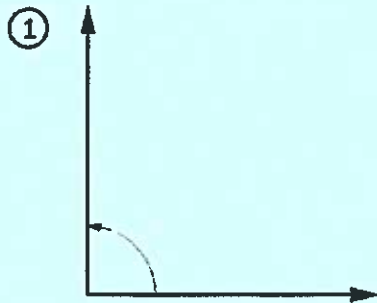
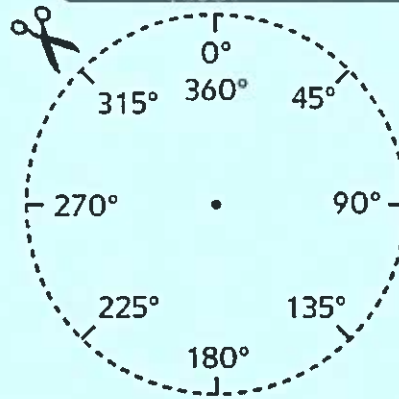


Measuring Angles

Cut out the angle measurer and use a pencil to poke a hole through the center.

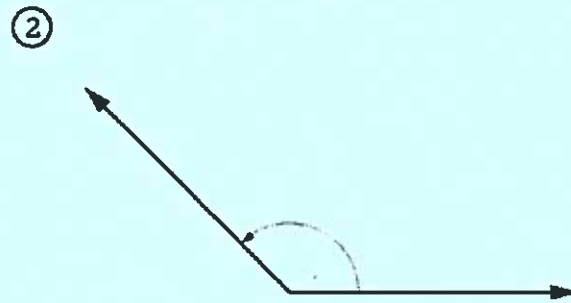
Label each angle *acute*, *right*, or *obtuse*.

Then use the angle measurer to measure each angle.



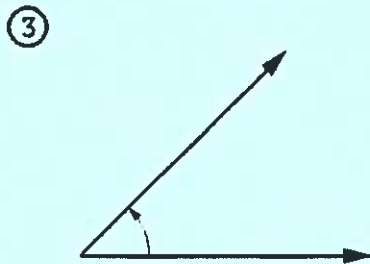
Type of angle: _____

Angle measure: _____



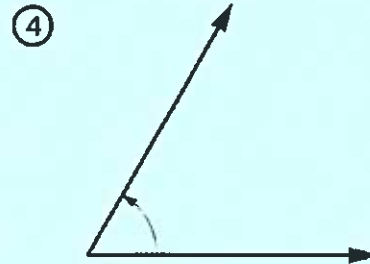
Type of angle: _____

Angle measure: _____



Type of angle: _____

Angle measure: _____



Type of angle: _____

Angle measure: _____

Practice

Show your work.

Multiply.

⑤

$$\begin{array}{r} 173 \\ * \quad 4 \\ \hline \end{array}$$

⑥

$$\begin{array}{r} 247 \\ * \quad 6 \\ \hline \end{array}$$

⑦

$$\begin{array}{r} 34 \\ * \quad 20 \\ \hline \end{array}$$

Write the value of the underlined digit in each number.

76,952 _____

2,706,261 _____

569,426 _____

18,439,032 _____

252,684,132 _____

83,924 _____

279,326,011 _____

43,984,368 _____

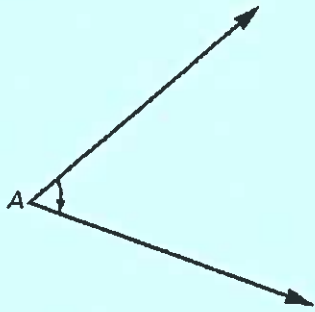
Measuring Angles with a Protractor

Home Link 6-10		
NAME _____	DATE _____	TIME _____

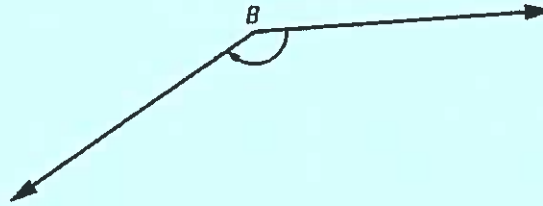
First estimate whether the angles measure more or less than 90° . Then use a half-circle protractor to measure them.



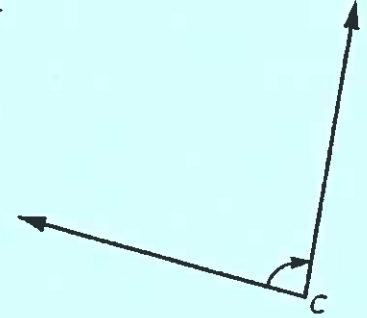
① $\angle A$: _____[°]



② $\angle B$: _____[°]



③ $\angle C$: _____[°]



④ $\angle QRS$: _____[°]

⑤ $\angle NOP$: _____[°]

⑥ $\angle KLM$: _____[°]

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Practice

⑦

$$\begin{array}{r} 23,807 \\ + 42,004 \\ \hline \end{array}$$

⑧

$$\begin{array}{r} 53,0083 \\ + 28,3690 \\ \hline \end{array}$$

⑨

$$\begin{array}{r} 87,942 \\ - 23,851 \\ \hline \end{array}$$

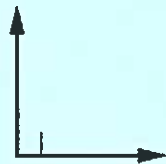
⑩

$$\begin{array}{r} 60,0299 \\ - 51,0345 \\ \hline \end{array}$$

Finding Angle Measures



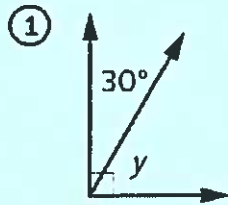
Find the unknown angle measures in Problems 1–6. Do not use a protractor.



A right angle measures 90° .

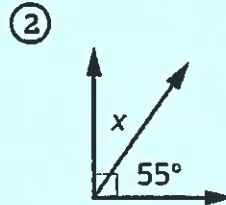


A straight angle measures 180° .



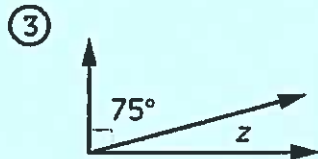
Equation with unknown: _____

Answer: _____



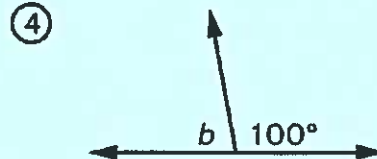
Equation with unknown: _____

Answer: _____



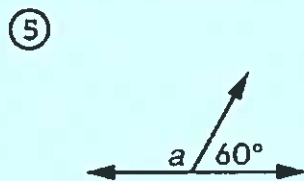
Equation with unknown: _____

Answer: _____



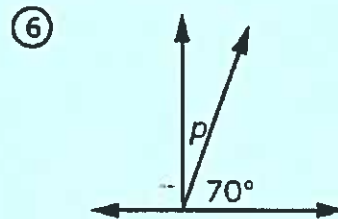
Equation with unknown: _____

Answer: _____



Equation with unknown: _____

Answer: _____



Equation with unknown: _____

Answer: _____

Practice

Order the fractions from smallest to largest.

⑦ $\frac{7}{10}, \frac{7}{8}, \frac{7}{12}, \frac{7}{9}$ _____

⑧ $\frac{5}{9}, \frac{99}{100}, \frac{1}{4}, \frac{9}{10}$ _____

$9\overline{)36}$ $7\overline{)49}$ $7\overline{)42}$ $5\overline{)30}$ $5\overline{)40}$ $6\overline{)42}$ $6\overline{)48}$ $9\overline{)45}$ $7\overline{)28}$ $5\overline{)20}$

$9\overline{)63}$ $4\overline{)24}$ $8\overline{)32}$ $4\overline{)20}$ $7\overline{)35}$ $5\overline{)35}$ $4\overline{)16}$ $7\overline{)63}$ $6\overline{)54}$ $7\overline{)56}$

$8\overline{)64}$ $8\overline{)40}$ $6\overline{)30}$ $4\overline{)28}$ $9\overline{)81}$ $9\overline{)54}$ $6\overline{)36}$ $8\overline{)48}$ $4\overline{)32}$ $4\overline{)36}$

$8\overline{)72}$ $5\overline{)45}$ $6\overline{)24}$ $9\overline{)72}$ $5\overline{)25}$ $8\overline{)56}$ $8\overline{)56}$ $8\overline{)40}$ $9\overline{)36}$ $6\overline{)30}$

$9\overline{)81}$ $4\overline{)20}$ $7\overline{)28}$ $6\overline{)42}$ $8\overline{)48}$ $4\overline{)16}$ $4\overline{)32}$ $5\overline{)35}$ $8\overline{)72}$ $5\overline{)20}$

Solve showing all your work.

There are 58 pieces of candy in one bag and 59 pieces in another bag. Katie wants to share the candy equally with her brothers. How many pieces of candy with each of the three children get?

Solving Number Stories

Home Link 6-12'

NAME _____

DATE _____

TIME _____

Write a number model with an unknown to represent each problem. Then solve.



- ① Martin had some leftover fruit from making fruit salad. He had $\frac{3}{12}$ pound of strawberries and $\frac{1}{12}$ pound of blueberries.

Which fruit weighed more? _____

- a. How many pounds of fruit did Martin have left?

Number model with unknown: _____

Answer: _____ pound

- b. How much more did the strawberries weigh than the blueberries?

Number model with unknown: _____

Answer: _____ pound

- ② Charlotte and Beth each made a vegetable salad to take to a reunion. Together the salads weighed 6 pounds. Charlotte's salad weighed $3\frac{1}{2}$ pounds.

- a. How much did Beth's salad weigh?

Number model with unknown: _____

Answer: _____ pounds

- b. How much more did Charlotte's salad weigh than Beth's?

Number model with unknown: _____

Answer: _____ pound

- ③ Andy's potato salad weighed $1\frac{3}{8}$ pounds more than Mardi's. Mardi's potato salad weighed $4\frac{2}{8}$ pounds. How much did Andy's potato salad weigh?

Number model with unknown: _____

Answer: _____ pounds

Practice

④ $826 * 5 =$ _____

⑤ $48 * 50 =$ _____

Use the space on the back to show your work.

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4.	5.
----	----

Solve each problem below.

- 1. Steve walks home every day from school. He leaves school at 3:40 and arrives home at 4:05. How long does it take him to walk home from school?**

- 2. Nancy and her family wanted to watch a movie together last night. They choose to watch a movie that was 1 hour and 45 minutes long. If they began watching the movie at 7:40, what time was the movie finished?**

- 3. Stephanie ran in the 20k race last weekend in Pottstown. She left the starting line at 9:15, and she tried her very best. She ran almost all the way but had to walk to catch her breath part way through the course. If she ran across the finish line at 10:40, how many minutes did it take her to complete the 20k race?**

Multiplying a Fraction by a Whole Number



Solve. Use drawings, words, and equations to represent the problems.

- ① 5 vans were needed for a camp field trip. There were 9 children per van.

How many children went on the field trip? _____ children

Drawing: _____

Words: _____ groups of _____

Addition equation: _____

Multiplication equation: _____

- ② Penny and her 2 friends each ate $\frac{1}{6}$ of a cake. How much cake did they eat?

_____ of a cake

Drawing: _____

Words: _____ groups of _____

Addition equation: _____

Multiplication equation: _____

- ③ Christopher wants to give his 4 friends $\frac{3}{5}$ of a veggie pizza each.

How much veggie pizza will he need? _____ veggie pizzas

Drawing: _____

Words: _____ groups of _____

Addition equation: _____

Multiplication equation: _____

Practice

④ $84 \div 6 =$ _____

⑤ $76 \div 4 =$ _____

⑥ _____ $= 90 \div 5$

4.

5.

6.

Add or subtract.

$$\frac{2}{5} + \frac{1}{5} =$$

$$\frac{6}{7} - \frac{3}{7} =$$

$$\frac{2}{9} + \frac{3}{9} + \frac{5}{9} =$$

$$\frac{3}{8} + \frac{4}{8} =$$

$$4\frac{6}{7} - 2\frac{2}{7} =$$

$$6\frac{3}{8} + 5\frac{2}{8} =$$