Objectives:
- Students will divide positive integers from the multiplication table without remainders, as evidenced by them passing one-minute quizzes.
- Students will solve percent equations, as evidenced by them completing a warm-up worksheet where they do so.
- Students will solve percent problems using percent equations, as evidenced by them completing a homework assignment where they do so.

Materials:
- Unit calendar transparency
- Minute Quiz 5-7
- Warm-up 5-7
- Notes #5-7 and Homework #5-7 (front and back)
- Notes #5-7 Teacher's Edition

Do Now:
- Park stuff
- Work on warm-up
- Get ready for minute quiz

Homework:
- Homework #5-7
- 8 hours of ALEKS due Today

Time	Activity
Before Bell	**AGENDA, DO NOW, AND WARM-UPS** Write the **agenda** and the **do now** on the board. As students enter the classroom, shake their hands and direct them to follow the directions listed for the "do now."
10 min	**MINUTE QUIZ, WARM-UP, ATTENDANCE, AND HOMEWORK COLLECTION** **Minute Quiz and Warm-up** When the bell rings, quickly go around and put the **minute quiz** on each student's desk, face down. Then, start everyone on the quiz at the same time and give everyone one minute. Students should work on the warm-up when they're done with the minute quiz. After the minute is over, have a student collect the minute quizzes and give them to the teacher's aide (TA) to grade. **Attendance and Collect Homework** While students work on the warm-up, take **attendance** and have the TA collect **homework** & stamp homework checkers.
5 min	**ANNOUNCEMENTS** Explain to students that you have a couple announcements to make. **ALEKS** Ask students, *The first announcement has to do with ALEKS. This week, how many hours of ALEKS are due Today?* Point to the homework assignment that indicates the answer. *[Eight.]* **Unit Overview** *The second announcement is to describe what we're doing today.* Put the unit calendar transparency on the overhead. *Last time we met, we learned how to solve percent problems using proportions. Today, we will learn how to solve percent problems using another method called percent equations.*
25 min	**LESSON** Go through "Notes 5-7." Afterwards, have the TA go around and stamp warm-up & notes checkers.
35 min	**CLASSWORK & ALEKS** **Classwork** Students must complete problems 1, 3, and 5 on their homework assignment before working on ALEKS. This is to ensure that students will be able to do the rest of the problems before they leave

	class.
	ALEKS
	When students finish their classwork, they should work with **ALEKS**. Use this student work time to **return graded homework**.
5 min	**CLEAN UP** Students must check the laptops with the teacher or the TA before putting them away. After putting the laptops away, students should pack up, sit in their seats, and wait to be dismissed by the teacher (not by the bell). Make sure students push in their chairs as they leave.

Numeracy
Minute Quiz 5-7 A

Name:
Date: Period:

Solve the following division problems. You have exactly one minute!

$18 \div 2 =$ $18 \div 3 =$ $40 \div 8 =$

$16 \div 4 =$ $81 \div 9 =$ $60 \div 12 =$

$66 \div 6 =$ $28 \div 4 =$ $3 \div 1 =$

$28 \div 4 =$ $56 \div 7 =$ $14 \div 2 =$

Numeracy   Name:
Minute Quiz 5-7 B   Date: Period:

Solve the following division problems. You have exactly one minute!

24 ÷ 4 =   21 ÷ 3 =   132 ÷ 12 =

44 ÷ 4 =   50 ÷ 10 =   12 ÷ 6 =

20 ÷ 4 =   24 ÷ 6 =   30 ÷ 10 =

30 ÷ 5 =   33 ÷ 3 =   56 ÷ 7 =

Numeracy
Minute Quiz 5-7 C

Solve the following division problems. You have exactly one minute!

7 ÷ 1 =   63 ÷ 7 =   28 ÷ 7 =

120 ÷ 10 =   12 ÷ 2 =   24 ÷ 3 =

7 ÷ 1 =   28 ÷ 4 =   6 ÷ 1 =

11 ÷ 1 =   25 ÷ 5 =   8 ÷ 2 =

Numeracy
Warm-up 5-7

Name:
Date: Period:

Solve each equation.

1) $n = \dfrac{20}{100} \cdot 75$

2) $30 = \dfrac{x}{100} \cdot 40$

3) $24 = \dfrac{80}{100} \cdot x$

4) $n = \dfrac{30}{100} \cdot 60$

5) $35 = \dfrac{x}{100} \cdot 70$

6) $207 = \dfrac{46}{100} \cdot x$

Introduction

Last time, we solved percent problems using proportions.
Today, we will solve them using percent equations.

Two important points before we start:
1. "of" means multiply
2. A percent is a ratio that compares a number to 100.
   So, 5% = 5/100

Finding Part of a Whole

Ex: What is 20% of 75?   Ex: What is 65% of 245?
   n = 20/100 · 75   n = 65/100 · 245
   n = 1500 / 100   n = 15925 / 100
   n = 15   n = 159.25

Finding a Percent

Ex: 30 is what percent of 40?   Ex: 52 is what percent of 60?
   30 =   x%   · 40   52 =   x%   · 60
   30 =   x/100   · 40   52 =   x/100   · 60
   30 · 100 = 40x   52 · 100 = 60x
   3000/40 = x   5200/60 = x
   75 = x   86.7 = x
   So, 30 is 75% of 40.   So, 52 is 86.7% of 60.

Finding a Whole Amount

Ex: 24 is 80% of what number?   Ex: 207 is 46% of what number?
   24 = 80/100 · x   207 = 46/100 · x
   2400 = 80x   20700 = 46x
   2400 / 80 = x   20700 / 46 = x
   30 = x   450 = x

Introduction

Last time, we solved _____ using _____.
Today, we will solve them using _____.

Two important points before we start:
 1. _____ means _____
 2. A percent is _____.
    So,

Finding Part of a Whole

Ex: Ex:

Finding a Percent

Ex: Ex:

Finding a Whole Amount

Ex: Ex:

Solve the following percent problems using percent equations.
1. What is 30% of 30?   **2.** What is 40% of 25?

3. 11 is what percent of 20?   **4.** 96 is what percent of 150?

5. 120 is 15% of what number?   **6.** 32 is 40% of what number?

7. Currently, Oakland's sales tax is 9.75%. So, if you bought a car that costs $20,000, the sales tax would be

$$9.75\% \text{ of } \$20000 = \frac{9.75}{100} \cdot \$20000 = \$1950.$$

So, you would pay $1,950 in taxes.
Last month, Oakland considered raising the sales tax to 10.25%. At this new rate, what would be the sales tax if you bought a car that costs $20,000?

10.25 percent sales tax proposed for Oakland

Christopher Heredia, Chronicle Staff Writer

Friday, April 3, 2009

Oakland could soon have the highest sales tax in the Bay Area. On Thursday, City Councilwoman Jean Quan proposed asking voters to raise the sales tax to 10.25 percent to help offset a general fund deficit that could surpass $120 million.

The proposal, which will go before the council on April 21, faces an uphill battle because two prominent council members - President Jane Brunner and Vice Mayor Ignacio De La Fuente - said they will oppose it.

"We have to give people options," Quan said, noting that increasing the sales tax is one way of generating revenue as city leaders face cutting services and hundreds of city jobs.

Oakland has already laid off dozens of employees and imposed a 13-day shutdown of city services to balance its budget.

Quan said the sales tax increase would be among several revenue-generating options voters could choose from during a special city election set for July 21. Voters also are being asked to approve an increase in the city's hotel tax, a corporate transfer tax and a tax increase for medical marijuana dispensaries.

The council had agreed on Tuesday to put on the ballot a modified Measure OO, which would reduce by millions the city's mandatory general fund set aside for youth programs.

"My sense from talking with people is that they'd be more willing to give money if it went to broad uses such as senior programs and police; this sales tax increase would achieve that," Quan said.

The tax measures on the ballot could generate an additional $8 million a year, Quan said. The sales tax increase, depending on whether it is one-quarter percent or one-half percent would generate $8 million or $16 million a year.

"I'm ... not supporting a sales tax increase," De La Fuente said Thursday in voting at Rules Committee to send the item to the full council. Brunner concurred.

Oakland's 9.75 percent sales tax is already among the highest in the state. If voters approved increasing the tax, to 10.25 percent, Oakland would join the Los Angeles County cities of Pico Rivera and South Gate at that level, the highest sales tax among cities.

Oakland, like cities across the nation, is suffering from the downturn in the economy and a drop-off in real estate transfer taxes. The biggest share of the city's $1 billion general fund budget goes to pay

city employee salaries, with most of it going to police services.

"We don't think it's the best approach to dealing with the budget crisis," said Scott Peterson, public policy director for the Oakland Metropolitan Chamber of Commerce, adding that instead of raising the sales tax he would rather see the city boost business attraction and job development to increase revenue.

Sales tax in california cities

-- Pico Rivera (Los Angeles County): 10.25 percent

-- South Gate (Los Angeles County): 10.25 percent

-- Oakland: proposed 10-10.25 percent (now 9.75 percent)

-- Berkeley: 9.75 percent

San Francisco: 9.5 percent

-- San Rafael: 9.5 percent

-- Los Angeles: 9.25 percent

-- Palo Alto: 9.25 percent

-- Fresno: 8.975 percent

-- Sacramento: 8.75 percent

-- Fairfield: 8.375 percent

Sources: California State Board of Equalization; City of Oakland

E-mail Christopher Heredia at cheredia@sfchronicle.com.