

7:45 Put warm-up on the board:

1. Turn in homework, take a donut.
2. $\frac{1}{2} - \frac{1}{3} =$ Just do it. (Nike swoop) A: $\frac{3}{6} - \frac{2}{6} = \frac{1}{6}$
3. On "Math Club" days, school starts at 8:10 and ends at 3:15. How many hours long is your school day?
A: $3\frac{5}{6} + 3\frac{1}{4} = 6 + \frac{10}{12} + \frac{3}{12} = 6\frac{13}{12} = 7\frac{1}{12}$
A: or 7 hours 5 minutes
4. There are 16 ounces per pound. How many pounds is 84 ounces?
Method 1: Long division, $84 \div 16 = 5.25$
Method 2: Reducing fraction, $\frac{84}{16} = \frac{42}{8} = \frac{21}{4} = 5\frac{1}{4}$
5. Find the prime factors of 693. A: $3 \times 3 \times 7 \times 11$

The following are trick questions and math jokes!

6. Suppose I have a 20' ladder and a 30' rope. Then I find two trees and tie one end of each rope 20' up in a tree. If I want the bottom of the 'U' in the rope to be 5' above the ground, then how far apart must the two trees be? A: touching, it takes 15' of rope to go down, then 15' to go back up again to the 20' level!
7. A farmer has 2 haystacks in each of 13 fields, and he puts them all together, how many haystacks does he have? A: one big one
8. A farmer sees 26 birds on a telephone wire and shoots one dead, how many are left? A: none, they all flew away
9. A farmer has 26 rabbits in a field and shoots one dead, how many are left? A: one, the dead one

Orally: A farmer has twenty sick sheep in a pen and one died, how many are left? A: 19

8:10 Circulate attendance sheet
Discuss warm-ups

8:30 Discuss top 3 problems:

- Prob 1e: LCM of 16 and 18 A: 144
- Prob 5a: How many primes are there from 1 to 50?
Write all 50, cross out every two, every three, etc.
List: 2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47 = 15 total
- Prob 3: Even \times even, even \times odd, odd \times odd
- Prob 8: Double vision: $11 \times 91 = 1001$
What other factors make 1001? Ans: $11 \times 7 \times 13 = 1001$

8:50 Lesson 3

Prime factor lookup table
Emphasize: lots of examples, how to check your work

Backup topics if time is leftover:

Finding primes using Eratosthenes Sieve, from 1 to 50
Multiplying negative numbers
Adding negatives on number line, or
Start homework

9:10 Hand outs, dismissed!