

**Solve equations (Similar to what we were doing at the last class)**

E1  $(5*x - 2) / 3 = (4*x - 1) / 2$

E2  $(7*x - 8) / 5 = (2*x + 5) / 4$

E3  $(-8*x - 1) / 2 = (5 - 3*x) / 5$

E4  $(7*x - 8) / 5 = (2*x + 5) / 4$

E5  $3*(2 + 5*x) / 4 = 2*(6*x - 3) / 5$

E6  $5(3x + 1) = 12$

E7  $(x + 2) / (x + 3) = 4$

E8  $(2x - 9) / (3x - 2) = -3$

R1 Using the larger tractor, Don can plow a field in 3 hours. Using the smaller tractor he could plow the same field in 5 hours. If he has a friend drive the smaller tractor, how long will it take them to plow the field working together?

R2 Anne can wash the window in 40 minutes if she works alone. Jeff working alone takes an hour to do the same windows. If they work together, how long will it take them to wash the windows?

## Averages

The sum of all numbers in a set divided by the count of those numbers is called Arithmetic Average, or Average, or Mean.

A1 What is the average of the following numbers: 7, 2, 4, 7, 4

A2 What is the average of the following numbers: -7, -2, -4, -7, -4

A3 What is the average of the following numbers: 37, 32, 34, 37, 34

A4 Find average of  $\frac{3}{8}$ ,  $\frac{1}{16}$  and  $\frac{3}{32}$

A5 The average of Nick's first four scores is 114. What is the score he needs in the fifth quiz to achieve an average of 120?

- A6 If 13 is the first of seven consecutive odd numbers; what is their average?
- A7 Carol's average score on her first 3 tests is 90. If her average on her last 2 tests is 80, what is her average score for all 5 tests?
- A8 Arithmetic average of six numbers is 120. First three of them have average 60. What is the average of the other three?
- A9 If the average of five consecutive even numbers is 8, what is the smallest of the five numbers?
- Q1 In a certain game 10 chips worth 50 points. How many points would 9 chips worth?

Q2 In a certain game  $N$  chips worth 50 points. How many points would  $(N - 1)$  chips worth?

Q3 In a certain game 50 chips worth  $N$  points. How many chips can you buy for  $(N - 1)$  points?