

## Math 4. Homework 9.

### 1. Compute:

a)  $\frac{14}{15} \cdot \frac{10}{49} + 5\frac{3}{7}$  ;

c)  $1\frac{3}{11} - \frac{27}{44} \cdot \frac{4}{9}$  ;

b)  $\left(1 - \frac{3}{4}\right) \cdot \left(\frac{4}{5} - \frac{3}{4}\right)$  ;

d)  $14 \cdot \left(\frac{1}{2} + \frac{1}{3} + \frac{1}{4}\right)$  ;



### 2. Compute:

$6 - 8 =$

$-6 + 8 =$

$-8 + (-6) =$

$-42 - 7 =$

$-12 + 4 =$

$-4 - 2 =$

$16 - (-6) =$

$47 - 54 =$

$-3 - 6 =$

$9 + (-8) =$

$-5 - (-7) =$

$10 + (-12) =$

### 3. Simplify:

(a)  $\frac{5500}{9500} =$

(b)  $\frac{1485}{1755} =$

(c)  $\frac{5(39-a)+b(39-a)}{5+b} =$

(d)  $\frac{a-ab}{1-b} =$

### 4. Fill the table:

$a$	5		-8		$-(-189)$	43
$-a$		-2		8		

5. Jack divided 1932 apples between 17 people and had 11 apples left, Jill divided 261 apples between 17 people and had 6 left. If **you don't have a paper and a pencil** to help Jack and Jill with calculations, can you tell them if they can divide apples between 17 people evenly after combining them?

**6. Solve equations:**

$$2x - 2 = 16$$

$$2x - 2 = -16$$

$$3x + 6 = -48$$

7. Peter got a new book. On the first day he read  $\frac{1}{3}$  of the whole book and on the second day he read  $\frac{1}{3}$  of the rest of the book. On the third day, Peter once again read  $\frac{1}{3}$  of the rest of the book and now he needs to read 80 more pages to finish the book. How many pages are there in the book?

8. Table in the picture on the right should be filled by the numbers 1, 2, 3, 4, and 5 in such a way that no number can be put more than once in any row, column or diagonal. What number should be in the middle cell?

3	4			5
2				
		?		
				4

9. At the party, all kids were given identical gift-bags with fruits. All together these bags contained 123 oranges and 82 apples. How many kids came to the party? How many apples and oranges were in every bag?

**10.** A package of plastic forks contains 16 forks. A package of plastic knives contains 12 knives. What is the smallest number of packages of each kind you must buy to get the same number of forks as knives? (*Hint: Least Common Multiple*)

**11.** Glass holds 200 grams of milk. Which part of glass should be filled with milk to get 160 grams.

**12.** Which of the pictures below are the cube nets?

