A and G 1. Class work 28.

Test.



- 1. Solve the equations: a. |2x - 8| = 10;
 - *b*. ||x| 5| = 1

2. Simplify:

a.
$$(a+3)(a+1);$$

b.
$$(x-1)(x+1);$$

3. The city currently has 48,400 inhabitants. It is known that the population of this city is increasing annually by 10%. How many inhabitants were in the city two years ago?

4. Add fractions:
a.
$$\frac{4x}{x-1} + \frac{2-7x}{1-x};$$

$$b. \quad \frac{15}{2x-8} + \frac{7}{x-4};$$

5. Reduce the following fractions (for valid variables values):

$$a. \quad \frac{2ab-8a}{3ab-12a};$$

$$d. \quad \frac{3p^2 - 8pq}{24pq - 9p^2};$$

6. There are 30 rows in the theater. Each row has 20 seats. Only 72 people bought tickets to see the new movie. How many different ways are there for them to sit?

7. The angles of a triangle are in the ratio 1:3:8. Find the measures of the three angles of this triangle.

8. Represent fractions as decimals:

a.
$$\frac{3}{50}$$
; b. $\frac{4}{125}$

- 9. Represent as fractions:
 - a. $1.\overline{351}$ b. $1.3\overline{51}$ c. $1.35\overline{1}$

