Math 4 a. Homework 1.

1. Solve the following equations:
   Example;

$2x + 8 = 36$

$2x = 36 - 8$

$2x = 28$

$x = 28 \div 2$

$x = 14$

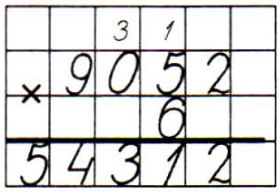
a) $x - 14 = 28$
b) $24 - y = 7$
c) $5x + 7 = 52$ (9)

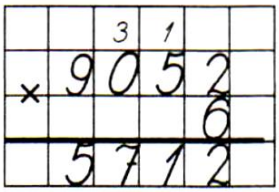
2. Calculate:
   Example:

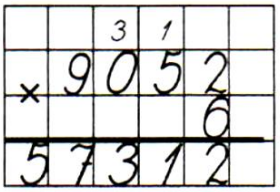
$(8 \div 2 + 3) \times 3 + (56 - 34) = (4 + 3) \times 3 + 22 = 21 + 22 = 43$

a. $(24 + 18) \div 7 - 0 \times (82 - 58) + 16 \times 3;$
b. $21 \div (96 - 89) + (7 \times 4 + 6) \times 2 - 56 \div 56;$ (9)

3. Find and correct mistakes in each example below. In the empty box solve this multiplication problem correctly. (6)







4. Word Problems:

Example:

Mary and Julia are twins. They invited 28 friends to their birthday party. Mary wrote 3 time as many invitation cards as Julia did. How many cards did Julia write? (4)

Julia - x cards

Mary - $3 \times x$ cards

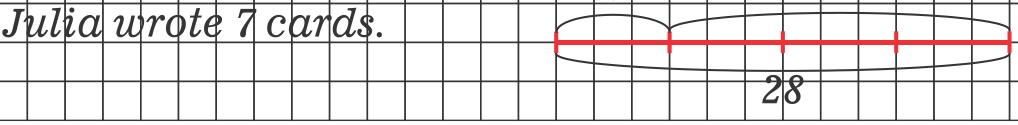
Total - 28 cards

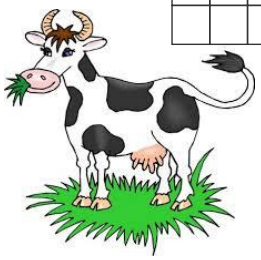
Julia wrote 7 cards.

$x + 3 \times x = 28$

$4 \times x = 28$

$x = 28 \div 4 = 7$





a. A cow weighs 20 times as much as sheep weights. Together the cow and the sheep weight 2100 lb. How many pounds does the sheep weight? How many pounds does the cow weight? (6)

b. There are 93 students in the 1st, 2nd and 3rd grades altogether. The number of students in the 1st and 2nd grades is 62, and in 2nd and 3rd grades is 64. How many students are there in each grade? (6)

5. Replace the addition with multiplication: (6)

Example:

$14 + 14 + 14 + 14 = 4 \times 14$

$x + x + x = 3 \times x$

a. $35 + 35 + 35 + 35 + 35$;

b. $120 + 120 + 120 + 120$

c. $a + a + a + a + a + a + a + a$;

d. $x + x + x + x + x$;

e. $\underbrace{34 + 34 + \cdots + 34}_{10\ times}$

f. $\underbrace{23 + 23 + \cdots + 23}_{100\ times}$

e. $\underbrace{a + a + \cdots + a}_{100\ times}$

6. Compare without doing calculations (put <, >, or =):

   a. $2453 + 235$ ____ $2453 + 236$
   b. $2341 - 123$ ____ $2341 - 122$
   c. 234×123 ____ 234×122
   d. $456 \div 4$ ____ $456 \div 3$
   e. $a \div 4$ ____ $a \div 3$
   f. $b + 235$ ____ $b + 236$ (6)

7. Calculate by the most convenient way:

   a. $2608 + 529 + 392 + 271 =$
   b. $1016 + 704 + 250 + 884 + 296 =$ (4)

8. Compute: (6)

$\frac{2}{5} + \frac{1}{5} =$ $\frac{7}{9} - \frac{4}{9} =$ $\frac{1}{2} + \frac{1}{4} =$

$\frac{5}{9} + \frac{1}{9} =$ $\frac{3}{8} + \frac{1}{2} =$ $\frac{9}{12} - \frac{2}{3} =$