

MATH 4: Homework 1

1. Draw a coordinate plane on a graphing paper. Mark axis "X" and axis "Y" Mark and then connect the following points with the RULER.

$A(0,0) \rightarrow B(6,10) \rightarrow C(9,0) \rightarrow D(0,6) \rightarrow E(12,6) \rightarrow A(0,0)$.

Attach this graph to your homework.

2. Compose and solve an equation to answer the following question:

Lena is 5 years older than Andrew. Sum of their ages is 21. How old is each of them? (*hint: make an auxiliary drawing; make one of the kids an x , write an expression for another kid using x , write an equation, just like in the class. Solve it, write the answers: L: and A:)*)

3. A cookie costs the same as two packs of chewing gum. Together, a cookie and one pack of gum cost 75 cents. How much does the cookie cost? (*hint: make an auxiliary drawing and make the cheapest item x*).

4. You have a number of 8 - ounce cups and 12 - ounce cups. Would you be able to measure exactly ...

(a) ... 28 ounces of water? Show how.

(b) ... 34 ounces of water? Show how.

(c) ... 31 ounces of water? Show how.

5. Compute: (*surprise your parents by writing an answer to c. and d. without making a calculation- remember what we learned in the class*)

a. 25×25 b. 27×102 c. $11,111 \times 11,111$ d. $111,111,111 \times 111,111,111$

6. Compute using long division:

$1662 \div 6$

$1770 \div 3$

$1672 \div 8$

$1111 \div 11$



7. A cow weighs 20 times as much as sheep weighs. Together the cow and the sheep weigh 2100 lb.

a. How many pounds does the sheep weigh?



b. How many pounds does the cow weigh?

8. 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?

9. Replace the addition with multiplication:

Example: $x + x + x + x = x \times 4 = 4x$

$15+15+15+15+15=15 \times 5$

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

b. $a + a + a + a + a + a + a$

c. $x + x + x + x + x$

d. $\underbrace{82 + 82 + \dots + 82}_{10 \text{ times}}$

e. $\underbrace{82 + 82 + \dots + 82}_{100 \text{ times}}$

f. $\underbrace{15 + 15 + \dots + 15}_{x \text{ times}}$

g. $\underbrace{a + a + \dots + a}_{n \text{ times}}$