

Math 4. Homework #7.



1. Write the following numbers as products of their prime factors:

a) 1001

b) 2002

c) 24024 (divisible by 24)

2. Find the LCM (Least Common Multiple) and GCF (Greatest Common Divisor) of the following numbers ...

a) 16 and 12

b) 24 and 8

c) 28 and 30

3. In my class I will be giving quizzes several times a year. Each time I will include 8 questions on a quiz. Another teacher will be including 10 questions on each quiz in her class, but by the end of the year my and her students will all have the same number of questions. What is the **least** possible number of questions you and the other students will have to answer by the end of the year?

4. **Simplify the expression:**

$$5x + 12 - 2x + 7y + 6xy + 720 - y =$$

5. **Remove parenthesis:**

$$7(3t - 5 + 4g) =$$

6. Set $A = \{c, 5, 8, d, 14\}$, set $B = \{f, 6, 5, g, 81\}$

Write the set $C = A \cap B$

and the set $D = A \cup B$

Show on Venn's Diagram

7. Mary has a rectangular backyard with sides of 48 and 40 yards. She wants to create square flower beds and plant different kind of flowers in each flower bed. What is the largest possible size of one flower bed square if she makes all squares equal?



8. Compare fractions without calculations

a. $\frac{9}{25} \square \frac{8}{25}$

c. $\frac{111}{53} \square \frac{79}{84}$

b. $\frac{5}{19} \square \frac{5}{12}$

d. $\frac{44}{45} \square \frac{45}{46}$

e. $\frac{9}{43} \square \frac{18}{86}$

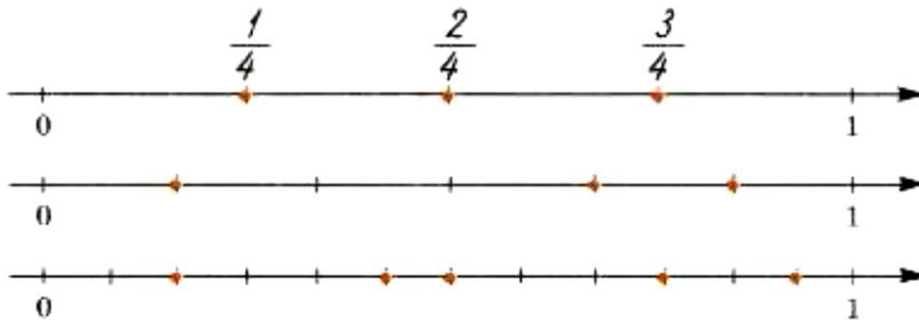
f. $\frac{31}{231} \square \frac{31}{344}$

9. Solve the following equations:

a) $\frac{3}{4} + y = 1$

b) $\frac{5}{7} - x = \frac{4}{7}$

10. On the picture below, put the corresponding fractions above each marked point:



11. The perimeter of a rectangle is 66cm. The length of one of its sides is $\frac{3}{11}$ of the perimeter. Find the area of this rectangle. (The perimeter of any polygon is the sum of the lengths of all the sides.)