MATH 5: Class Work 1 Math 4 REVIEW I

Review Topics

• Division with remainder. Divisibility tests by 2, 3, 4, 5, 6, 9. Divisors (factors), multiples.

• LCM, GCD. Finding by listing all divisors.

• Prime and composite numbers. Prime factorization.

• Finding GCD and LCM using prime factorization.

• Fractions - addition and subtraction, multiplication and division.

• Word problems with fractions.

Problems

1. Is the number 12345 divisible by 3? by 9? by 5? by 10?

2. Find the prime factorization of 204.

3. Find LCM and GCD of

(a) 28 and 30

(b) 365 and 30.

4. 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 have to buy to get exactly the same number of forks as knives?

5. Consider the product of all numbers from 1 to 25: $1 \times 2 \times \cdots \times 24 \times 25$. How many 3s will there be in the prime factorization for this number?

6. Compute:

(a)
$$\frac{17}{39} - \frac{4}{13}$$

(b)
$$\left(\frac{1}{30} + \frac{1}{36}\right) - \left(\frac{1}{9} - \frac{1}{18}\right)$$

7. Compare:

(a)
$$\frac{11}{6}$$
 and $\frac{21}{48}$

(b)
$$\frac{19}{57}$$
 and $\frac{19}{55}$

8. Compute:

(a)
$$\frac{3}{14} \times \frac{7}{9}$$

(b)
$$\frac{4}{32} \times \frac{8}{5}$$

9. Compute: $\frac{5}{8} \div \frac{16}{32}$, $12 \div \frac{6}{11}$, $\frac{15}{7} \div 3$

10. Yana has four apples. She left half an apple for herself and divided the rest of the apples between 7 of her friends. How much did each one of her friends get?

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11. Dan has mowed $\frac{2}{9}$ of his lawn in one day. On the next day, he mowed three times more than he did on the first day.

What part of the lawn did he mow on the first and the second day, and how much is left to do?

12. Martin read 36 pages of a book in 1 hour and 30 minutes.

How many pages did he read for 1 hour? How long it took him to read ten pages?