

Math 5e, Fall 2024 Homework 1

Homework #1 due September 25

Instructions: Homework must be written on separate sheets of paper, clearly writing the problem number you are solving and showing all work, not only the final answer. **Do not write answers on the page handout! Please attempt all problems.**

Homework must be submitted on time—at least 15 minutes before the start of the class—so that the solutions can be opened to other students. Homework will not be accepted and graded after the solutions are opened.

1. Find the following sums

a) $1 + 2 + 3 + \cdots + 49$

b) $1 + 3 + 5 + \cdots + 49$

2. Is the number 2345 divisible by 2? by 3? by 4? by 5? by 8?

3. If it is 7 a.m. now, what time of day will it be in 27 hours? 127 hours? 11043 hours?

4. Compute:

a) $\frac{14}{7} + \frac{45}{11}$

b) $\frac{7}{10} - \frac{1}{2}$

5. Compare $\frac{11}{6}$ and $\frac{7}{4}$

6. Mrs. Weatherby baked 175 cookies for a party. The children ate $\frac{4}{7}$ of the cookies. The adults ate 48 cookies. How many cookies were left?

7. There are 4 short stories in a book. The first story is 12 pages long, which is $\frac{2}{3}$ of the second story. The third story is $\frac{5}{6}$ of the length of the first two stories together. How long is the fourth story, if four stories together occupy 64 pages in the book?