

Math 5e, Fall 2024 Homework 8

Homework #8 is due November 13

Instructions: Some of the problems we solved in class, and some are new. Please try to solve all problems, do your best, and show your work. **Write on separate sheets of paper, not between the lines of this handout!**

1. Compute:

(a) $-7 - (-9) =$

(b) $-(-6 + (-4)) =$

(c) $-3 - (7 + (-6)) =$

(d) $-3 - (-4) + (-5) =$

(e) $-(-2) + 5 =$

(f) $-\frac{3}{4} - \left(-1\frac{1}{4}\right) =$

(g) $|(-3) + (-5)| =$

(h) $-|3 + (-6)| =$

(i) $2 - \left(\frac{3}{5} - 1\frac{1}{4}\right) =$

2. Solve the equations:

(a) $|x| = 3$

(b) $z + |-6| = -15$

(c) $|y - 8| = 12$

3. Calculate using factorization:

(a) $12 \times 17 + 35 \times 13 + 17 \times 23 =$

(b) $41 \times 80 + 25 \times 41 + 55 \times 29 =$

4. A math teacher asked her students to multiply an unknown number by 4 and then add 15. However, Alex multiplied the number by 15 and then added 4, and he still got the correct answer. What was the number?

5. A pet store sells parrots and canaries. A canary costs twice as much as a parrot. One customer bought 5 canaries and 3 parrots, while the other bought 3 canaries and 5 parrots. One of the customers paid \$20 more than the other. How much does each bird cost?

6. Timothy and Cristina together have 93 cents; Timothy and Joanna together have 104 cents; Joanna and Cristina together have 95 cents. How much money does each of them have?

7. There are 60 students in grade 5 of one middle school. At the end of the school year, 10% had a grade of D, 20% a grade of C, 40% B, and 30% A in English.

(a) Find the number of students that got A, B, C, and D

(b) Represent the information using a pie chart.

8. Write the numbers as decimals:

(a) $11 + \frac{5}{1000} + \frac{1}{100} + \frac{7}{10} =$

(b) $\frac{4}{10000} + \frac{1}{1000} + \frac{7}{10} =$

(c) $9 + \frac{1}{1000} + \frac{9}{100} =$

(d) $112 + \frac{5}{10000} + \frac{1}{10} =$

(e) $\frac{3}{1000} + \frac{1}{10000} =$

(f) $1010 + \frac{8}{10000} =$

(g) $100 + \frac{9}{1000} + \frac{1}{100} + \frac{9}{10} =$