

Math 5e, Fall 2024 Homework 2

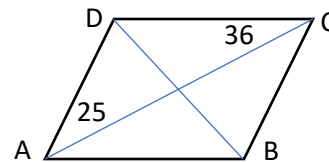
Homework #2 due October 2

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.**

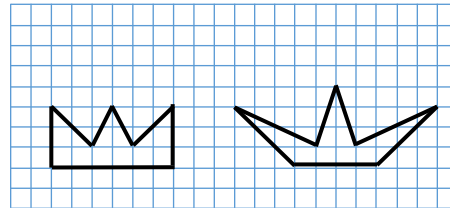
Homework must be submitted on time—at least 15 minutes before the start of the class—so that the solutions can be opened to other students. Homework will not be accepted and graded after the solutions are opened.

Write on separate sheets of paper, not between the lines of this handout!

1. Two of the angles between the diagonal and the side in parallelogram ABCD are marked. Can you find all other angles? – including the angles between sides and diagonals, and the angles between diagonals?



2. Find the area of the figures show to the right.



3. For $a = 2$, $b = 5$, find

- (a) $(+a) + (+b)$
- (b) $(-a) + (-b)$
- (c) $(+a) - (+b)$
- (d) $(+a) - (-b)$

4. Compute

a) $5 + ((-2) + (-7)) =$ b) $((+6) + (-7)) + (-12) =$ c) $-1\frac{3}{4} + \left(-\frac{2}{3}\right) =$

5. Solve the following equations

(a) $12 - x = 5$ (b) $(-5) \times x + 2 = 12$ (c) $|x| = 21$

6. Simplify the following expressions

(a) $5(x + 2) - 5(x - 2) =$ (b) $1 - 2(1 - 2(1 - 2x)) =$

7. Solve the following equations.

(a) $5(x - 2) = 25$ (b) $3x - 1 = 6$ (c) $(-2x) + 3 - (-5x) - (-7) = -(-1)$