

Instructions: This is a list of some material that is essential prerequisite for this course. That is, your instructor expects that you have a definite idea of the notions expounded below and that you be able to solve the problems below without any review. If you find yourself having trouble on some items below you should seek immediate help from your instructor or from the tutors in the Learning Laboratory.

Essential prerequisites include:

- (a) Arithmetic operations with signed numbers.
 - (b) Ability to translate English sentences into algebraic expressions.
 - (c) Ability to solve one-variable linear equations.
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You should be able to quickly answer all questions below without needing any review.

1. $3(5 - 7) =$
2. $5 \cdot 6 - 7 =$
3. $7 - 2(1 + 3) =$
4. $(-4)^2 - 5^2 =$
5. $(5 \cdot 2)^2 =$
6. $(7 - 2)(1 + 3) =$
7. $\frac{1}{3}(-9) - \frac{1}{5}(10) =$
8. $\frac{2 - 3 - 4}{2 + 3 + 5} =$
9. $|3 - (5 + 7)| =$
10. $\frac{1}{15} - \frac{1}{3} \cdot \frac{1}{5} =$
11. $(3 + x) - (3 - x) =$
12. $\frac{3}{5} \cdot \frac{5}{z} =$
13. Circle the correct sign between the numbers: -3.1 \langle $=$ \rangle -3.01 .
14. What is 16% of 200?