Name: _____ Date: _____

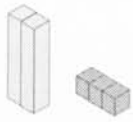
Lab 4-1: Modeling Variables and Expressions on the Basic Mat

Algeblocks can be used to represent variables and variable expressions.

Example: Show $(2x - 3)$.

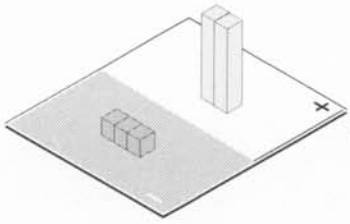
Step 1.

Identify the correct blocks and count out the number you need.



Step 2.

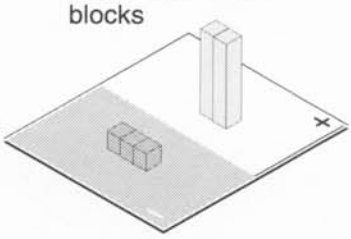
Place the blocks on the correct side of the Basic Mat.



Step 3.

Read the mat.

2 of x blocks and negative 3 of unit blocks



Step 4.

Record.

$2x - 3$

Try It

1. You have been asked to model the expression $^-(4y - 5)$. Which blocks would you use? _____

_____

2. Where would you place the blocks on the mat? _____

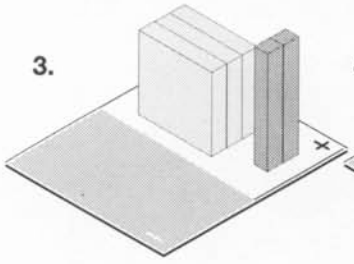
_____

_____

Practice

Read each mat and write the expression.

3.



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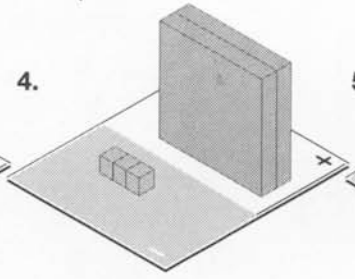
4.



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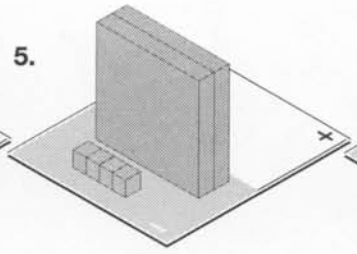
5.



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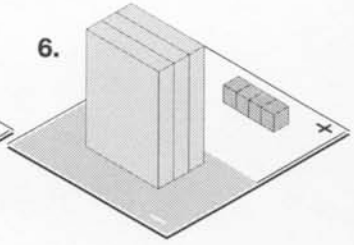
6.



_____

Use Algeblocks and the Basic Mat to show each of the following expressions. Sketch each answer.

7. $xy + 5$

8. $3y - 4$

9. $2y^2 - 3xy$

10. $xy - 4x$

11. $2x - 2y - 2$

12. $2y^2 + 3x - 2xy$

13. $3 - 2x^2 - y^2$

14. $^-3y - (^-4) - 2x$