

Big Ideas Math® Game Closet



6 Sticks



Materials:

- Paper
- Pencil

Directions:

Use exactly six 6's and the operations +, −, ×, and ÷ to write expressions that have values of 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10.

For example, $666 - 666 = 0$.

Who Wins?

The student that has the most expressions wins.

Possible Answers:

$666 - 666$	$= 0$
$(6 \div 6)(6 \div 6)(6 \div 6)$	$= 1$
$(6 \div 6)(6 \div 6) + (6 \div 6)$	$= 2$
$(6 \div 6) + (6 \div 6) + (6 \div 6)$	$= 3$
$(6 + 6 + 6) \div 6 + (6 \div 6)$	$= 4$
$(6 + 6 + 6 + 6 + 6) \div 6$	$= 5$
$(6 \div 6) + (6 \times 6 - 6) \div 6$	$= 6$
$(6 \times 6 + 6) \div 6 (6 \div 6)$	$= 7$
$(6 \times 6 + 6) \div 6 + (6 \div 6)$	$= 8$
$(66 - 6) \div 6 - (6 \div 6)$	$= 9$
$(66 - 6) \div 6 \times (6 \div 6)$	$= 10$