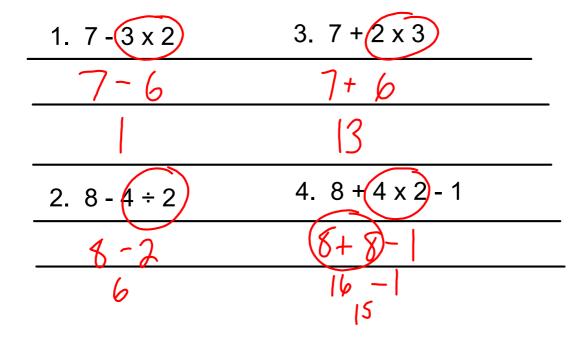
Order of Operations

The order of operations is based on one kind of "big idea": That more powerful operations are done before less powerful (unless we're explicitly told otherwise).



Which of these is the most powerful? addition, subtraction, division, multiplication

multiplication and division are the inverse of each other

addition and subtraction are the inverse of each other

So we will state that there are two 'tiers' of power (for now)

Most powerful: multiplication and division Least powerful: addition and subtraction

BUT, we can be told EXPLICITLY to do something first, with parenthesis - () or brackets - []

OOPS examples

$$3 + 4 \times 2 \div 4$$
 $3 + 8 \div 4$
 $3 + 2$

$$8 - 3 \times 2 \div 3 \times 2$$

 $8 - 6 \div 3 \times 2$
 $8 - 2 \times 2$
 $8 - 4$

$$2 \times 3 \div 2 \times 3 - 2 \times 4$$
 $6 \div 2 \times 3 - 2 \times 4$
 $3 \times 3 - 2 \times 4$
 $9 - 2 \times 4$
 $9 - 2 \times 4$

(9 - 3 x 3) x 4 x 45672351436