

1.1. Order of operations

Remember

Which operations would you use to find the answer to this question?

$$18 - 6 \div 3 = ?$$

We use brackets if we want certain operations carried out first. To make sure everyone gets the same answer when evaluating an expression, we use this order of operations:

- Do the operations in brackets.
- Multiply and divide, in order, from left to right.
- Then add and subtract, in order, from left to right.

 Evaluate: $16 - 14 \div 2$

$$\begin{aligned} &16 - (14 \div 2) \\ &\quad \downarrow \\ &= 16 - 7 \\ &= 9 \end{aligned}$$

Divide first: $14 \div 2 = 7$
Then subtract: $16 - 7 = 9$



 Evaluate: $7 \times (4 + 8)$

$$\begin{aligned} &\quad \downarrow \\ &= 7 \times 12 \\ &= 84 \end{aligned}$$

Do the operation in brackets first: $4 + 8 = 12$
Then multiply: $7 \times 12 = 84$



The order of operations is:
Brackets
Multiply and **D**ivide
Add and **S**ubtract

