

Order of operations with brackets

WHAT THIS LESSON TEACHES

Brackets first, then multiply or divide, then add or subtract.

→ $4 + 6 \times 2 = 16$ (multiply first)

→ $(4 + 6) \times 2 = 20$ (brackets first)

MODEL THIS ON THE BOARD

WORK OUT $3 \times (8 - 2) + 5$

1 Do the brackets first: $8 - 2 = 6$

2 Multiply next: $3 \times 6 = 18$

3 Add last: $18 + 5 = 23$

DISCUSSION STARTER

REFLECT Why is it useful that everyone agrees on the same order of operations?

ANSWER KEY

a) 17

b) 27

c) 22

Q1: 4 points

Q2: 28

Q3: 77

Q4: 17 tokens

a) **Sometimes** — They do only when they enclose an operation that would otherwise come later.

b) **Always** — Brackets are the highest priority in the order of operations.

c) **Never** — You still follow multiply or divide before add or subtract.

d) **Always** — Brackets must be done first regardless of the outer operations.

EXTENSION SHEET · STRETCH ANSWERS

S1: 45

S2: 48

S3: 45

S4: 116

S5: 143