

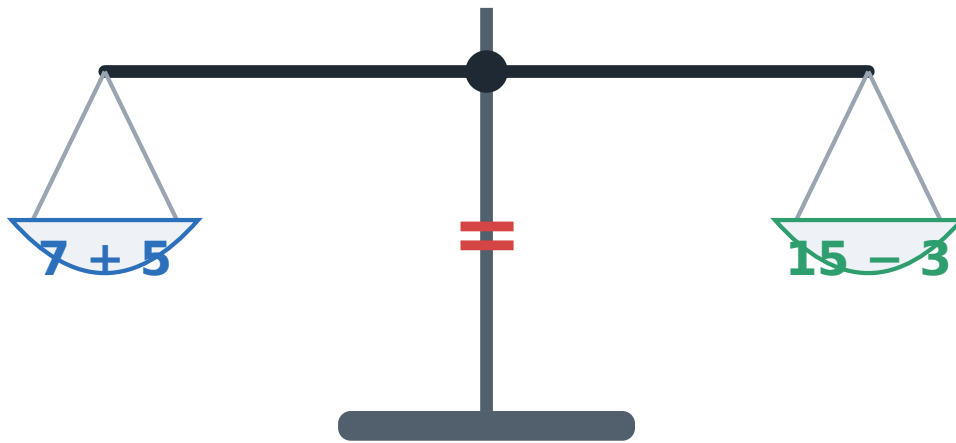
Equalities & Inequalities — Practice Worksheet

Part A — Balancing equalities & inequalities

Part A — Balancing equalities & inequalities

The **equals sign** does **not** mean "the answer comes next" — it means **both sides have the same value**. We can complete, check and build true number sentences using the four operations, brackets and the order of operations.

The Equals Sign Means “Same Value”



both sides have the same value (12)

A true equality balances: both sides equal 12.

Worked example — is it true? Is $7 + 5 = 15 - 3$ true? Left = 12, right = 12. The scale balances, so **yes**.

Worked example — order of operations. Do brackets first, then $\times$ and $\div$, then $+$ and $-$. So $2 + 3 \times 4 = 2 + 12 = 14$ (not 20).

Complete the statement (make both sides equal)

Q1. $8 + 6 = 20 - \underline{\hspace{2cm}}$ **Q2.** $5 \times 4 = \underline{\hspace{2cm}} + 8$

Q3. $36 \div 4 = \underline{\hspace{2cm}} \times 3$ **Q4.** $15 - 7 = \underline{\hspace{2cm}} + 3$

True or false? (Is it balanced?)

Q5. $9 + 3 = 4 \times 3$ _____

Q6. $18 - 5 = 2 \times 7$ _____

Q7. $(6 + 4) \times 2 = 6 + 4 \times 2$ _____

Q8. $24 \div (2 + 2) = 24 \div 2 + 2$ _____

Brackets & order of operations

Q9. Work out: (a) $3 + 4 \times 5$ (b) $(3 + 4) \times 5$ (c) $20 - (6 + 2)$ (d) $20 - 6 + 2$

Q10. Place brackets to make this true: $4 + 2 \times 3 = 18$.

Answer: _____

Construct your own

Q11. Write an equality where one side uses subtraction and the other uses multiplication, both equal to 12.

Q12. Write an inequality comparing 7×3 and 5×4 . Which is larger?
