

Order of operations: brackets first

Do the work in brackets first. Then multiply or divide, then add or subtract.

1 Study the model.

Worked example: same numbers, different answers

No brackets: multiply first

$$\begin{aligned} 8 + 4 \times 3 \\ = 8 + 12 \\ = 20 \end{aligned}$$

Brackets first

$$\begin{aligned} (8 + 4) \times 3 \\ = 12 \times 3 \\ = 36 \end{aligned}$$

The order

- 1 Brackets first
- 2 Multiply and divide, left to right
- 3 Add and subtract, left to right

2 Work out the brackets first. Show each step on the line.

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|---|---|
| <p>1. $(6 + 4) \times 5$ = </p> <hr style="width: 80%; margin-left: 0;"/> <p>3. $30 \div (2 + 4)$ = </p> <hr style="width: 80%; margin-left: 0;"/> <p>5. $(15 - 7) \times 3$ = </p> <hr style="width: 80%; margin-left: 0;"/> <p>7. $4 \times (9 - 3)$ = </p> <hr style="width: 80%; margin-left: 0;"/> <p>9. $(20 - 8) \div 4$ = </p> <hr style="width: 80%; margin-left: 0;"/> <p>11. $(7 + 5) \div (6 - 3)$ = </p> <hr style="width: 80%; margin-left: 0;"/> | <p>2. $6 + 4 \times 5$ = </p> <hr style="width: 80%; margin-left: 0;"/> <p>4. $30 \div 2 + 4$ = </p> <hr style="width: 80%; margin-left: 0;"/> <p>6. $15 - 7 \times 2$ = </p> <hr style="width: 80%; margin-left: 0;"/> <p>8. $48 \div (4 \times 3)$ = </p> <hr style="width: 80%; margin-left: 0;"/> <p>10. $2 \times (3 + 5) - 6$ = </p> <hr style="width: 80%; margin-left: 0;"/> <p>12. $50 - (12 + 8) \times 2$ = </p> <hr style="width: 80%; margin-left: 0;"/> |
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3 Solve the snack bar problems. Write one expression.

13. Hot chocolate is 3 dollars and a muffin is 2 dollars.
Ximena buys 4 of each. What does she spend?

Expression _____ Answer dollars

14. Five friends share the cost of 2 pizzas at 15 dollars each. How much does each friend pay?

Expression _____ Answer dollars