

Exercise 2.5

1 Calculate each of the following:

- (i) $3 + 3$ (ii) $3 - 3$ (iii) 3×3 (iv) $3 \div 3$ (v) 3^3

2 Calculate each of the following:

- (i) $2^2 + 3^2$ (ii) $2^3 + 3^2$ (iii) $3^2 + 4^2$ (iv) $1^2 + 1^{10}$ (v) $1^2 \times 3^2$ (vi) $5^2 \times 2^2$

3 Find the value of each of the following:

- (i) $3 + 4 \times 2$ (ii) $5 + 6 \times 3$ (iii) $7 \times 2 - 4$ (iv) $2 \times (6 - 2)$

4 Find the value of each of the following:

- (i) $21 + 8 \times 2$ (ii) $8 \times 11 + 23$ (iii) $10 \div 5 + 3 \times 4$ (iv) $20 \div 10 + 5 \times 2$

5 Pavel says that $2 + 3 \times 5$ is equal to 25, but Marie says it is equal to 17. Who is correct? Explain your answer.

6 Evaluate, without using a calculator, each of the following:

- (i) $45 \div (3 + 2)$ (ii) $5 \times 4 + 24 \div 8$ (iii) $5(6) + 2(6) + 7(6)$
 (iv) $50 \div 10 + 2$ (v) $98 \div (3 + 4)^2$

7 Insert operators to make each calculation below correct.

Use the operators $+$, $-$ and \times .

- (i) $5 \square 4 \square 2 = 22$ (ii) $5 \square 4 \square 2 = 3$ (iii) $5 \square 4 \square 2 = 13$ (iv) $5 \square 4 \square 2 = 18$

8 Insert operators to make each calculation below correct.

Use the operators \div , $+$ and $-$.

- (i) $27 \square 9 \square 3 = 6$ (ii) $27 \square 9 \square 3 = 30$ (iii) $27 \square 9 \square 3 = 33$ (iv) $27 \square 9 \square 3 = 24$

Revision Exercises

1. (a) Find, without using a calculator, the value of each of the following:

- (i) $243 + 178$
 (ii) 7×6
 (iii) $24 \div (9 - 7)$
 (iv) 3^4
 (v) $(5)(6) \div 3$
 (vi) $3 + 2 \times 3^2$

(b) What number is halfway between 16 and 30?

2. Jakub makes a **four-digit** password, using the digits of his date of birth:

2	5	1	0	9	8
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He doesn't use any digit more than once.

(a) Write down a password Jakub could make that is:

- (i) An odd number
 (ii) A multiple of 5

(b) Write down the **largest** number that Jakub could use as a password.