

# OPERATIONS WITH WHOLE NUMBERS

## A ADDITION

### A.1 SOLVING REAL-WORLD PROBLEMS

**Ex 1:** Emma collected 3 112 postcards, and her sister gave her 2 458 more.

How many postcards does Emma have in total?

postcards

**Ex 2:** In a car race, Car A traveled 18 432 kilometers, and Car B traveled 22 516 kilometers.

How many kilometers did they travel in total?

kilometers

**Ex 3:** A charity event collected 25 670 dollars on the first day and 34 859 dollars on the second day.

How much money was collected in total?

dollars

**Ex 4:** An orchard produced 43 215 apples and 21 638 pears this season.

How many fruits were harvested in total?

fruits

## B SUBTRACTION

### B.1 SOLVING REAL-WORLD PROBLEMS

**Ex 5:** You buy an article for 137 dollars. You give the seller a 200 dollar bill.

How much change will you get back?

dollars

**Ex 6:** Hugo has 120 Pokémon cards, and Louis has 80 Pokémon cards.

What is the difference in the number of cards they have?

cards

**Ex 7:** Hugo has 265 Pokémon cards. He has 187 more cards than Louis.

How many cards does Louis have?

cards

**Ex 8:** Emma has 425 stickers. She gives 189 stickers to her friend.

How many stickers does Emma have left?

stickers

## C MULTIPLICATION

### C.1 SOLVING REAL-WORLD PROBLEMS

**Ex 9:** Each day, my meal costs \$5. What is the total cost in a year (365 days)?

Total cost =  dollars

**Ex 10:** In a school, there are 240 students. Each student needs 12 books. How many books are needed in total?

Total books =

**Ex 11:** A library has 245 books on each shelf. If the library has 25 shelves, how many books does it have in total?

Total books =

**Ex 12:** I do 20 Maths exercises per week. How many exercises do I do in a year (52 weeks)?

Total exercises =

## D DIVISION

### D.1 SOLVING REAL-WORLD PROBLEMS

**Ex 13:** A baker packs 42 cookies into boxes. Each box holds 3 cookies. How many full boxes does the baker have?

boxes

How many cookies will be left over?

cookies

**Ex 14:** 6 pirates share equally a treasure of 200 golden coins. How many coins does each pirate receive? How many coins remain?

Coins per pirate =  coins

Leftover coins =  coins

**Ex 15:** A teacher distributes 250 candies equally among 12 children. How many candies does each child receive? How many candies remain?

Candies per child =  candies

Leftover candies =  candies

**Ex 16:** An art supply store has 456 pencils. They want to pack these pencils equally into boxes containing 20 pencils each. How many full boxes can be filled? How many pencils remain?

Full boxes =  boxes

Leftover pencils =  pencils

## E ORDER OF OPERATIONS

### E.1 PERFORMING MULTI-OPERATIONS

**Ex 17:**

$$4 + 2 \times (2 + 3) = \boxed{\phantom{00}}$$

**Ex 18:**

$$10 - 2 \times (5 - 3) = \boxed{\phantom{00}}$$

**Ex 19:**

$$3 \times (7 - 2) + 1 = \boxed{\phantom{00}}$$

**Ex 20:**

$$12 \div (6 - 2) + 3 = \boxed{\phantom{00}}$$

**Ex 21:**

$$(2 + 8) \div 5 - 2 = \boxed{\phantom{00}}$$

$$\square 20 - 3 + 4 + 5$$

$$\square 20 - (3 \times 4) + 5$$

$$\square (20 - 3) \times 4 + 5$$

**MCQ 26:** There are 30 students in a class. Today, 2 students are absent. The teacher divides the remaining students into 4 equal teams for a game. Which expression shows the number of students on each team?

**Choose the correct expression**

$$\square 30 - 2 \div 4$$

$$\square (30 - 2) \div 4$$

$$\square 30 \div 4 - 2$$

**MCQ 27:** For a school bake sale, Maria bakes 4 batches of 12 cookies. At the same time, John bakes 3 batches of 10 cookies. Which expression represents the total number of cookies they baked together?

**Choose the correct expression**

$$\square 4 + 12 \times 3 + 10$$

$$\square (4 + 3) \times (12 + 10)$$

$$\square (4 \times 12) + (3 \times 10)$$

## F SOLVING PROBLEMS

### F.1 BUILDING THE EXPRESSION

**MCQ 22:** A farmer has 3 fields, and each field contains 10 apple trees. If each tree produces 8 apples, what is the total number of apples?

**Choose the correct expression**

$$\square 3 + 10 \times 8$$

$$\square 3 \times 10 \times 8$$

$$\square (10 \times 8) \div 3$$

**MCQ 23:** A library has 50 books. 14 books are loaned out. The remaining books are then placed equally on 4 shelves. How many books are on each shelf?

**Choose the correct expression**

$$\square 50 - (14 \div 4)$$

$$\square 50 + 14 \div 4$$

$$\square (50 - 14) \div 4$$

**MCQ 24:** A baker makes 5 trays of cookies, with 12 cookies on each tray. He sells 40 cookies. How many cookies are left?

**Choose the correct expression**

$$\square (5 \times 12) - 40$$

$$\square 5 \times (12 - 40)$$

$$\square 5 + 12 - 40$$

**MCQ 25:** Sam has 20 dollars. He buys 3 notebooks that cost 4 dollars each. He then finds 5 dollars. How much money does he have now?

**Choose the correct expression**

**MCQ 28:** Leo starts with 5 bags of marbles, and each bag contains 10 marbles. He loses 8 marbles during a game. Which expression shows how many marbles Leo has left?

**Choose the correct expression**

$$\square 5 \times (10 + 8)$$

$$\square (5 \times 10) - 8$$

$$\square 5 + 10 - 8$$

### F.2 SOLVING REAL-WORLD PROBLEMS

**Ex 29:** Hugo is 5 years old. Louis is twice as old as Hugo, plus 3 years. What is the age of Louis?

Louis is  $\boxed{\phantom{00}}$  years old.

**Ex 30:** A zoo houses 15 animals in the morning. Throughout the day, 5 new animals are admitted. In the evening, the zookeeper divides the total number of animals into 5 equal groups. How many animals are in each group?

There are  $\boxed{\phantom{00}}$  animals in each group.

**Ex 31:** Hugo has 12 pencils. He gives 3 pencils to each of his 2 friends and then purchases 5 more. What is the final number of pencils Hugo possesses?

Hugo possesses  $\boxed{\phantom{00}}$  pencils.

**Ex 32:** You have 3 apples, you purchase 5 more, and then you share the total quantity equally with a friend. How many apples are left?

You retain  $\boxed{\phantom{00}}$  apples.