ORDER OF OPERATIONS

A WHY THE ORDER MATTERS

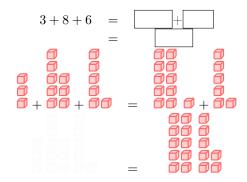
A.1 ADDING FROM LEFT TO RIGHT

Ex 1:

Ex 2:

Ex 3:

Ex 4:



A.2 ADDING FROM LEFT TO RIGHT

Ex 5:

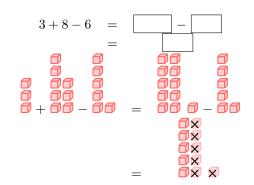
Ex 6:

Ex 7:

Ex 8:

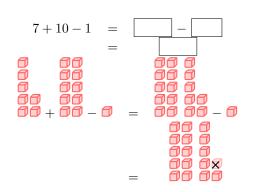
A.3 ADDING AND SUBTRACTING FROM LEFT TO RIGHT

Ex 9:

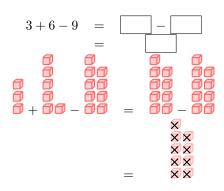


Ex 10:

Ex 11:



Ex 12:



A.4 MULTIPLYING AND DIVIDING FROM LEFT TO RIGHT

Ex 13:

$$2 \times 3 \times 2 = \times$$

Ex 14:

$$\begin{array}{cccc} 4 \times 2 \times 2 & = & & \times \\ & = & & & \end{array}$$

Ex 15:

Ex 16:

A.5 PERFORMING OPERATIONS WITHOUT PARENTHESES

Ex 17:

$$4 + 2 \times 3 =$$

Ex 18:

$$2 \times 3 - 1 = \boxed{}$$

Ex 19:

$$1+3\times3=$$

Ex 20:

$$10 - 2 \times 3 =$$

Ex 21:

$$10 \div 2 + 3 = \boxed{}$$

Ex 22:

$$10 - 4 \div 2 =$$

A.6 PERFORMING OPERATIONS WITH PARENTHESES

Ex 23:

$$2 \times (2+3) =$$

Ex 24:

$$(2+4) \div 2 =$$

Ex 25:

$$4 \times (4 \div 2) =$$

Ex 26:

$$3 + (3 \times 2) =$$

Ex 27:

$$(7-1)\times 3=\boxed{}$$

A.7 PERFORMING MULTI-OPERATIONS

Ex 28:

$$4 + 2 \times (2 + 3) =$$

Ex 29:

$$10 - 2 \times (5 - 3) =$$

Ex 30:

$$3 \times (7-2) + 1 =$$

Ex 31:

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

Ex 32:

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

B SOLVING PROBLEMS

B.1 BUILDING THE EXPRESSION

MCQ 33: 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 × 8

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

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

MCQ 34: 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

$\Box 50 - (14 \div$	4)
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$$\Box 50 + 14 \div 4$$

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

MCQ 35: 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

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

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

$$\Box 5 + 12 - 40$$

MCQ 36: 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

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

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

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

MCQ 37: 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

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

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

$$\square$$
 30 ÷ 4 - 2

MCQ 38: 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

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

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

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

MCQ 39: 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

$$\Box$$
 5 × (10 + 8)

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

$$\Box 5 + 10 - 8$$

B.2 SOLVING REAL-WORLD PROBLEMS

Ex 40: Hugo is 5 years old. Louis is twice as old as Hugo, plus 3 years. What is the age of Louis?

Ex 41: 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?

Ex 42: You have 3 apples, you purchase 5 more, and then you share the total quantity equally with a friend. How many apples are left?

Ex 43: 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?