

Mathematical Operations

Q1. In a certain code language, '+' represents '×', '-' represents '+', '×' represents '÷' and '÷' represents '-'. What is the answer to the following question?

$$12 \times 6 \div 5 + 4 = ?$$

- (a) 8
- (b) -18
- (c) 42
- (d) 18

Q2. If "-" mean "divided by", "+" means "multiplied by", "÷" means "added to", "×" means "subtracted from", then $11 \div 6 - 2 + 5 \times 3 = ?$

- (a) 17
- (b) 21
- (c) 23
- (d) 26

Q3. In a certain code language, '+' represents '×', '-' represents '+', '×' represents '÷' and '÷' represents '-'. What is the answer to the following question?

$$9 + 3 - 72 \times 6 \div 3 = ?$$

- (a) 46
- (b) 21
- (c) 9
- (d) 36

Q4. In a certain code language, '+' represents '×', '-' represents '+', '×' represents '÷' and '÷' represents '-'. What is the answer to the following question?

$$60 \times 5 + 3 \div 24 - 6 = ?$$

- (a) 18
- (b) 94
- (c) 9
- (d) 57

Q5. In a certain code language, '+' represents '×', '-' represents '+', '×' represents '÷' and '÷' represents '-'. What is the answer to the following question?

$$15 - 5 + 25 \div 10 = ?$$

- (a) 22
- (b) -4
- (c) 17
- (d) 130

Q6. If “ α ” denotes “subtracted from”, “ β ” denotes “multiplied by”, “ θ ” denotes “added to” and “ δ ” denotes “divided by”, then

$$10 \theta 8 \beta 4 \delta 8 \alpha 9 = ?$$

- (a) 7
- (b) 5
- (c) 9
- (d) 11

Q7. In a certain code language, ‘+’ represents ‘ \times ’, ‘-’ represents ‘+’, ‘ \times ’ represents ‘ \div ’ and ‘ \div ’ represents ‘-’. What is the answer to the following question?

$$45 \times 5 + 2 - 20 = ?$$

- (a) 17
- (b) 81
- (c) 38
- (d) 64

Q8. In a certain code language, ‘+’ represents ‘ \times ’, ‘-’ represents ‘+’, ‘ \times ’ represents ‘ \div ’ and ‘ \div ’ represents ‘-’. What is the answer to the following question?

$$45 \times 5 - 24 + 3 \div 80 = ?$$

- (a) 100
- (b) 52
- (c) 1
- (d) 82

Q9. In a certain code language, ‘+’ represents ‘ \times ’, ‘-’ represents ‘+’, ‘ \times ’ represents ‘ \div ’ and ‘ \div ’ represents ‘-’. What is the answer to the following question?

$$80 + 2 \div 25 + 5 - 10 = ?$$

- (a) 35
- (b) 98
- (c) 36
- (d) 45

Q10. In a certain code language, ‘+’ represents ‘ \times ’, ‘-’ represents ‘+’, ‘ \times ’ represents ‘ \div ’ and ‘ \div ’ represents ‘-’. What is the answer to the following question?

$$72 \times 9 - 14 + 2 = ?$$

- (a) 20
- (b) 86
- (c) 30
- (d) 36

Solutions

S1. Ans.(b)

Sol. According to the question,

+	-	×	÷
×	+	÷	-

$$\Rightarrow ? = 12 \times 6 \div 5 + 4$$

$$\Rightarrow ? = 12 \div 6 - 5 \times 4$$

$$\Rightarrow ? = 2 - 20$$

$$\therefore ? = \boxed{-18}$$

S2. Ans.(c)

Sol.

-	÷	+	×
÷	+	×	-

$$? = 11 \div 6 - 2 + 5 \times 3$$

$$\Rightarrow ? = 11 + 6 \div 2 \times 5 - 3$$

$$\Rightarrow ? = 11 + 3 \times 5 - 3$$

$$\Rightarrow ? = 11 + 15 - 3$$

$$\therefore ? = 26 - 3 = \boxed{23}$$

S3. Ans.(d)

Sol. $9 + 3 - 72 \times 6 \div 3 = ?$

+	-	×	÷
×	+	÷	-

Changing signs according to question,

$$9 \times 3 + 72 \div 6 - 3 = ?$$

$$\Rightarrow 27 + 12 - 3 = ?$$

$$\Rightarrow 39 - 3 = ?$$

$$\therefore ? = \boxed{36}$$

S4. Ans.(a)

Sol. $60 \times 5 + 3 \div 24 - 6 = ?$

+	-	×	÷
×	+	÷	-

Changing signs according to the question,

$$60 \div 5 \times 3 - 24 + 6 = ?$$

$$\Rightarrow 12 \times 3 - 24 + 6 = ?$$

$$\Rightarrow 36 - 24 + 6 = ?$$

$$\Rightarrow 42 - 24 = ?$$

$$\therefore ? = \boxed{18}$$

S5. Ans.(d)

Sol. $? = 15 - 5 + 25 \div 10$
 $= 15 + 5 \times 25 - 10$
 $= 15 + 125 - 10 = \boxed{130}$

S6. Ans.(b)**Sol.**

α	β	θ	δ
-	\times	+	\div

$10 \theta 8 \beta 4 \delta 8 \alpha 9 = ?$
 $\Rightarrow 10 + 8 \times \div 8 - 9 = ?$
 $\Rightarrow 10 + 8 \times \frac{1}{2} - 9 = ?$
 $\Rightarrow 10 + 4 - 9 = ?$
 $\Rightarrow 14 - 9 = ?$
 $\therefore ? = \boxed{5}$

S7. Ans.(c)

Sol. $45 \times 5 + 2 - 20 = ?$

+	-	\times	\div
\times	+	\div	-

Changing signs according to question,
 $45 \div 5 \times 2 + 20 = ?$
 $\Rightarrow 9 \times 2 + 20 = ?$
 $\Rightarrow 18 + 20 = ?$
 $\therefore ? = \boxed{38}$

S8. Ans.(c)

Sol. $45 \times 5 - 24 + 3 \div 80 = ?$

+	-	\times	\div
\times	+	\div	-

Changing signs according to question,
 $45 \div 5 + 24 \times 3 - 80 = ?$
 $\Rightarrow 9 + 72 - 80 = ?$
 $\Rightarrow 81 - 80 = ?$
 $? = \boxed{1}$

S9. Ans.(d)

Sol. $80 + 2 \div 25 + 5 - 10 = ?$

+	-	\times	\div
\times	+	\div	-

$\Rightarrow 80 \times 2 - 25 \times 5 + 10 = ?$
 $\Rightarrow 160 - 125 + 10 = ?$
 $\Rightarrow 170 - 125 = ?$
 $\therefore ? = \boxed{45}$

S10. Ans.(d)

Sol. $72 \times 9 - 14 + 2 = ?$

+	-	×	÷
×	+	÷	-

Changing signs according the question,

$$\Rightarrow 72 \div 9 + 14 \times 2 = ?$$

$$\Rightarrow 8 + 28 = ?$$

$$\therefore ? = \boxed{36}$$

