

Practice Questions

Type 1 Problem-Solving by Substitution

1. If '+' means 'divided by', '-' means 'added to', ' \times ' means 'subtracted from' and ' \div ' means 'multiplied by', then what is the value of $24 \div 12 - 18 + 9$?
 (1) -25 (2) 0.72 (3) 15.30 (4) 290
 (5) None of these
2. If '+' means 'minus', ' \times ' means 'divided by', ' \div ' means 'plus' and '-' means 'multiplied by', then which of the following will be the value of the expression $252 \times 9 - 5 + 32 \div 92$?
 (1) 95 (2) 168 (3) 192 (4) 200
 (5) None of these
3. If '+' means 'minus', '-' means 'added to', ' \times ' means 'divided by' and ' \div ' means 'multiplied by', then which of the following will be the value of the expression $3 \times 2 - 1 + 4 \div 2$?
 (1) -45 (2) -5.5 (3) 45 (4) 5.5
 (5) None of these
4. If ' \times ' means '−', '−' means '+', '+' means ' \div ' and ' \div ' means ' \times '. Which of the following will be the value of the expression $6 \times 4 - 3 + 2 \div 1$?
 (1) 1.5 (2) 2.5 (3) 3.5 (4) 4.5
 (5) None of these
5. If '+' means ' \div ', ' \div ' means ' \times ', ' \times ' means '+' and '-' means '−'. Then, what is the value of $17 + 8.5 - 3.5 \div 2 \times 3$?
 (1) -2 (2) 4 (3) 6 (4) 3
 (5) None of these
6. If ' \div ' means ' \times ', ' \times ' means '+', '+' means '−' and '−' means ' \div ', find the value of $16 \times 3 + 5 - 2 \div 4$.
 (1) 9 (2) 10 (3) 19 (4) 20
 (5) None of these
7. If '+' means ' \div ', ' \div ' means '−', '−' means ' \times ', ' \times ' means '+', then $12 + 6 \div 3 - 2 \times 8 = ?$
 (1) -2 (2) 2 (3) 4 (4) 8
 (5) None of these
8. If '+' means '−', '−' means ' \times ', ' \div ' means '+' and ' \times ' means ' \div ', then $15 - 3 + 10 \times 5 \div 5 = ?$
 (1) 5 (2) 22 (3) 48 (4) 52
 (5) None of these
9. If ' \times ' means ' \div ', '−' means ' \times ', ' \div ' means '+' and '+' means '−', then $(3 - 15 \div 19) \times 8 + 6 = ?$
 (1) -1 (2) 2 (3) 4 (4) 8
 (5) None of these

10. If ' \times ' means '+', '+' means ' \div ', '−' means ' \times ' and ' \div ' means ' $-$ ', then $8 \times 7 - 8 + 40 \div 2 = ?$
 (1) 1 (2) $7\frac{2}{5}$ (3) $8\frac{3}{5}$ (4) 44
 (5) None of these

Directions: (Q. Nos. 11 to 15) If '+' is \times , '-' is \div , \div is $-$ and $-$ is \times , then answer the following questions based on this information.

11. $21 \div 8 + 2 - 12 \times 3 = ?$
 (1) 14 (2) 9 (3) 13.5 (4) 11
 (5) None of these

12. $6 + 7 \times 3 - 8 \div 20 = ?$
 (1) -3 (2) 7 (3) 2 (4) 1
 (5) None of these

13. $15 \times 5 \div 3 + 1 - 1 = ?$
 (1) -1 (2) -2 (3) 3 (4) 1
 (5) None of these

14. $9 - 3 + 2 \div 16 \times 2 = ?$
 (1) 7 (2) 5 (3) 9 (4) 6
 (5) None of these

15. $6 - 9 + 8 \times 3 \div 20 = ?$
 (1) -2 (2) 6 (3) 10 (4) 12
 (5) None of these

Directions: (Q. Nos. 16 to 19) For the following questions,

\square means 'is bigger than'

Δ means 'is smaller than'

\bigcirc means 'is equal to'

\times means 'plus'

= means 'minus'

16. If $a \square c$ and $b \times d \bigcirc c$, then
 (1) $d \square a$ (2) $a \Delta d$ (3) $b \square c$ (4) $d \Delta a$
 (5) $c \square a$

17. If $a = b \Delta d = c$ and $a \bigcirc c$, then
 (1) $d \square b$ (2) $d \Delta b$ (3) $b \bigcirc d$ (4) $a \square b$
 (5) $a \bigcirc d$

18. If $a \times b \times c \bigcirc b \times c \times d$, then
 (1) $d \bigcirc c$ (2) $a \square d$ (3) $a \bigcirc d$ (4) $b \bigcirc c$
 (5) $b \square d$

19. If $b \square c$ but $b \Delta a$ and $c \times d \bigcirc a$, then relation between d will be
 (1) $d \square b$ (2) $d \Delta b$ (3) $b \bigcirc d$ (4) $b \Delta c$
 (5) Cannot be determined