MATHEMATICAL OPERATIONS

+, −, ×, ÷ are Mathematical symbols

>, <, ≥, ≤ are mathematical statements

1. If + means ÷, − means ×, × means −, ÷ means +. Which of the following will be value of expression $16 \div 8 - 4 + 2 \times 4$

A. + ⇏ ÷
− ⇒ ×
÷ ⇒ +
× ⇒ −

$16 \div 8 - 4 + 2 \times 4 \Rightarrow 16 + 8 \times 4 \div 2 - 4$

Then follow

B = Bracket
O = of
D = Divison
M = Multiply
A = Addition
S = Subtraction

$\Rightarrow 16 + 8 \times 4 \div 2 - 4$

$= 16 + 8 \times 2 - 4$

$= 16 + 16 - 4$

$= 32 - 4$

$= 28$

2. If + means ÷, − means ×, ÷ means +, × means −. Then $36 \times 12 + 4 \div 6 + 2 - 3 = ?$

A) $36 \times 12 + 4 \div 6 + 2 - 3 \Rightarrow 36 - 12 \div 4 + 6 \div 2 \times 3$

$= 36 - 3 + 3 \times 3$

$= 36 - 3 + 9$

$= 45 - 3$

$= 42$

3) If × = ÷, − means ×, ÷ means +, + means −. then $(3 - 15 \div 19) \times 8 + 6 = ?$

A. $(3 - 15 \div 19) \times 8 + 6 \Rightarrow (3 \times 15 + 19) \div 8 - 6$

$\Rightarrow (45 + 19) \div 8 - 6$

$\Rightarrow 64 \div 8 - 6$

$\Rightarrow 8 - 6$

$= 2$

4. If ÷ means +, − means ÷, X means −, + means X.

Then $\frac{(36 X 4) - 8 X 4}{4 + 8 X 2 + 16 \div 1} = ?$

A. $\frac{(36 X 4) - 8 X 4}{4 + 8 X 2 + 16 \div 1} \Rightarrow \frac{(36 - 4) \div 8 - 4}{4 X 8 - 2 X 16 + 1}$

$\Rightarrow \frac{32 \div 8 - 4}{32 - 32 + 1}$

$\Rightarrow \frac{4 - 4}{1} = \frac{0}{1} = 0$

5. If P means ÷, Q means X, R means +, S means −

Then $18 Q \overset{12}{R} P 4 R 5 S 6$

A. $18 Q 12 P 4 R 5 S 6 \Rightarrow 18 X 3 + 5 - 6$

$= 53.$

6. If L means X, M means ÷ P means +, Q means −

then $16 P 24 M 8 Q 6 M 2 L 3 = ?$

A. $16 P 24 M 8 Q 6 M 2 L 3 \Rightarrow 16 + 3 - 3 X 3$

$= 16$

7. If X means −, ÷ means +, + means ÷, − means X

then which equation is correct.

a) $50 - 5 \div 5 X 20 + 10 = 6$

b) $8 \div 10 - 3 + 5 X 6 = 8$

c) $6 X 2 + 3 \div 12 - 3 = 50$

d) $3 \div 7 - 5 X 10 + 3 = 10$

A. a) $50 X 5 + 5 - 20 \div 10 = 6$

$\times \quad 250 + 5 - 2 = 6$

$255 - 2 = 6$

$253 \neq 6$

b) $8 + 10 X 3 \div 5 - 6 = 8$

$8 + 10 X \frac{3}{5} - 6 = 8$

$8 + 6 - 6 = 8$

$14 - 6 = 8$

$8 = 8$

8. If P means +, Q means −, R means X, S means ÷

which one is correct?

a) $36 R 4 S 8 Q 7 P 4 = 10$

b) $16 R 12 P 49 S 7 Q 9 = 200$

c) $32 S 8 R 9 = 16 Q 12 R 12$

d) $8 R 8 P 8 S 8 Q 8 = 57$

A) (b) $16 \times 12 + 49 \div 7 - 9 = 200$

$192 + 7 - 9 = 200$

$199 - 9 = 200$

$190 \neq 200$

(c) $32 \div 8 \times 9 = 16 - 12 \times 12$

$4 \times 9 = 16 - 144$

$32 \neq 16 - 144$

(d) $8 \times 8 * 8 \div 8 - 8 = 57$

$64 + 1 - 8 = 57$

$65 - 8 = 57$

$57 = 57$

9. If $>$ means $+$, $<$ means $-$, $+$ means $\div$, $\wedge$ means $\times$, $-$ means $=$, $\times$ means $>$, $=$ means $<$. then choose correct statement in each of the following.

a) $6 + 3 > 8 = 4 + 2 < 1$

b) $4 > 6 + 2 \times 32 + 4 < 1$

c) $8 < 4 + 2 = 6 > 3$

d) $4 + 7 > 3 = 6 + 3 > 2$

A) (a) $6 \div 3 + 8 < 4 \div 2 - 1$

$2 + 8 < 2 - 1$

$10 < 1$ ✗

(b) $4 + 6 \div 2 > 32 \div 4 - 1$

$4 + 3 > 8 - 1$

$7 > 7$ ✗

(c) $8 - 4 \div 2 < 6 + 3$

$8 - 2 < 9$

$6 < 9$