Simplification Questions for SBI Clerk Pre

Directions: What value should come in place of question mark?

(1). $\dfrac{?}{529} = \dfrac{324}{?}$

    A. 404   B. 408   C. 414

    D. 424   E. None of these

(2). $\dfrac{2}{3} \div \dfrac{1}{3} \, of \, \dfrac{1}{2} \div \dfrac{1}{6} = ?$

    A. 15   B. 24   C. 34

    D. 25   E. None of these

(3). $125 \times 625 \div 25 = (5)^{13\,-\,?}$

    A. 6   B. 8   C. 5

    D. 14   E. None of these

(4). $216 \times 36 \div 1296 = (6)^{?-3}$

    A. 1   B. 3   C. 4

    D. 5   E. None of these

(5). $7^3 + 8^2 = 5^2 + x\% \, of \, 400$

    A. 97   B. 97.5   C. 98

    D. 95.5   E. None of these

(6). $145673.234 + 25432.236 - ? = 171055.47$

    A. 12345.34   B. 2345.45   C. 1555

    D. 500   E. None of these

(7). $6\,3 \times 13\,1 + 2^2 \times ? = 30\% \, of \, 520$

    A. 13   B. 13.5   C. 12

    D. 12.5   E. None of these

(8). $\sqrt{11^2 + 3^4 \times 7 - 13^2 + 10} = ?$

    A. 25   B. 23   C. 19

    D. 21   E. None of these

(9). $\dfrac{6}{14} + \dfrac{73}{18} \div \dfrac{7}{9} = ?$

    A. $5\dfrac{9}{14}$ B. $4\dfrac{9}{14}$ C. $10\dfrac{9}{7}$

D. $10\dfrac{5}{7}$ E. None of these

(**10**). $(0.3)^2 \times 5000 \div 2000\ of\ (0.5)^3 = ?$

     A. 18   B. 21   C. 1.8

     D. 2.1   E. None of these

Correct answers:

1	2	3	4	5	6	7	8	9	10
C	B	B	C	D	E	E	B	A	C

Explanations:

1.

$$\frac{?}{529} = \frac{324}{?}$$

$$? = \sqrt{529 \times 324}$$

? = 23 × 18

? = 414

Hence, option C is correct.

2.

$$\frac{2}{3} \div \frac{1}{3} \text{ of } \frac{1}{2} \div \frac{1}{6} = ?$$

$$\Rightarrow \frac{2}{3} \div \frac{1}{3} \text{ of } \frac{1}{2} \div \frac{1}{6} = ?$$

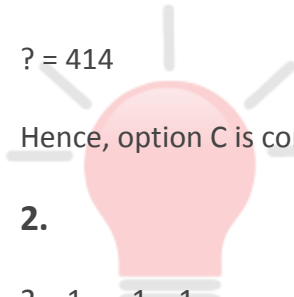$$\Rightarrow \frac{2}{3} \div \frac{1}{6} \div \frac{1}{6} = ?$$

$$\Rightarrow \frac{2}{3} \times 6 \times 6 = ?$$

⇒ ? = 24

Hence, option B is correct.

3.

$$125 \times 625 \div 25 = (5)^{(13 - ?)}$$

$\Rightarrow (5)^3 \times 5^2 = (5)^{(13-?)}$

$\Rightarrow ? = 13 - 5$

$\Rightarrow ? = 8$

Hence, option B is correct.

4.

$216 \times 36 \div 1296 = (6)^{?-3}$

$\Rightarrow 216 \times 36 \div 1296 = (6)^{?-3}$

$\Rightarrow 6^3 \times 6^2 \div 6^4 = (6)^{?-3}$

Taking the power, we get

$\Rightarrow 3 + 2 - 4 = ? - 3$

$\Rightarrow 3 + 2 - 4 + 3 = ?$

$\Rightarrow ? = 4$

Hence, option C is correct.

5.

$7^3 + 8^2 = 5^2 + ?\%$ of 400

$\Rightarrow 343 + 64 = 25 + 4x$

$\Rightarrow 382 = 4x$

$\Rightarrow x = 382/4$

$\Rightarrow x = 95.5$

Hence, option D is correct.

6.

$145673.234 + 25432.236 - ? = 171055.47$

145673.234 + 25432.236 − 171055.47 = 50

Hence, option E is correct.

7.

$6\dfrac{3}{4} \times 13\dfrac{1}{3} + 2^2 \times\ ? = 30\%\ of\ 520$

$\dfrac{27}{4} \times \dfrac{40}{3} + 4 \times\ ? = 156$

$4 \times\ ? = 156 - 90$

$4 \times\ ? = 66$

$? = 16.5$

Hence, option E is correct.

8.

$\sqrt{(11^2 + 3^4 \times 7 - 13^2 + 10)} = ?$

$? = \sqrt{121 + 567 - 169 + 10}$
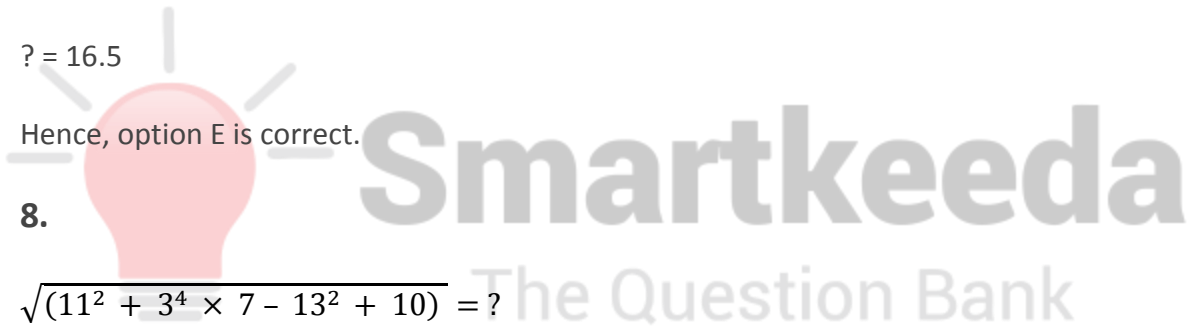
$? = \sqrt{529} = 23$

Hence, option B is correct.

9.

$\dfrac{6}{14} + \dfrac{73}{18} \div \dfrac{7}{9} = ?$

$\dfrac{6}{14} + \dfrac{73}{18} \times \dfrac{9}{7} = ?$

$\dfrac{6}{14} + \dfrac{73}{14} = \dfrac{79}{14} = 5\dfrac{9}{14}$

Hence, option A is correct.

10.

$(0.3)^2 \times 5000 \div 2000 \, of \, (0.5)^3 = ?$

$? = (0.3)^2 \times 5000 \div [2000 \times 0.5 \times 0.5 \times 0.5]$

? = 0.09 × 5000 ÷ 250

? = 1.8

Hence, option C is correct.