

Simplification

Direction (1): What should come in place of question mark (?) in the following questions. Find the exact value.

1. $\frac{6}{35} \times 1\frac{7}{48} \div \frac{4}{7} = ? + \frac{5}{32} - \frac{1}{8}$
(A) 11/36 (B) 5/16
(C) 16/39 (D) 11/32
(E) None of these

Direction (2–6): What value should come in place of question mark (?) in the following questions?

2. $3^7 \times 729 \div 243 = 3^5 \times 81 \times 27 \div 243$
(A) 3 (B) 4
(C) 5 (D) 6
(E) 7

3. $? = \frac{255}{102} \times \frac{272}{204} \div \frac{85}{153}$
(A) 7 (B) 6
(C) 5 (D) 4
(E) 9

4. $(25)? = (625) \div 125 \times 3125 \div 25$
(A) 0 (B) 1
(C) 3 (D) 2
(E) 4

5. $55\% \text{ of } 320 + 30\% \text{ of } 1080 = 20 \times ?$
(A) 25 (B) 500
(C) 50 (D) 20
(E) 15

6. $\sqrt{? + 27} \times 4 + 119 = 14\frac{2}{3} + 6\frac{1}{3}$
(A) 241 (B) 216
(C) 261 (D) 224
(E) 214

7. What value will come in place of question mark (?) in the following question?

$$\frac{18}{60} \times \frac{15}{108} \times ? = 19$$

(A) 466 (B) 442
(C) 456 (D) 470
(E) 468

8. What value will come in place of question mark (?) in the following question?

$$\frac{18}{292} \times \frac{73}{144} \times ? = 19$$

(A) 622 (B) 610
(C) 618 (D) 614
(E) 608

9. What value will come in place of question mark (?) in the following question?

$$625^{0.02} \times 625^{0.73} = ?$$

(A) 125 (B) 1
(C) 5 (D) 25
(E) 625

10. What value will come in place of question mark (?) in the following questions?

$$(21)^2 + (22)^2 + (24)^2 = ?$$

(A) 1528 (B) 1522
(C) 1497 (D) 1503
(E) 1501

11. What value will come in place of question mark (?) in the following question?

$$\sqrt{676} + ? = 3\frac{1}{3} \text{ of } 72$$

(A) 214 (B) 227
(C) 223 (D) 199
(E) 196

12. What value will come in place of question mark (?) in the following question?

$$\frac{180}{6} + 12 \times 9 = ? + \frac{300}{5} - 42$$

- (A) 136 (B) 130
(C) 116 (D) 120
(E) 110
13. What value will come in place of question mark (?) in the following question?
 $\frac{12}{15}$ of 40% of 1800 = ? \times 480
(A) 1.2 (B) 1.05
(C) 0.0 (D) 0.9
(E) 1.8
14. What value will come in place of question mark (?) in the following question?
 $49 \times 57 - 41 \times 18 = (?)^2 \times 3 + 1380$
(A) 15 (B) 21
(C) 7 (D) 3
(E) 25
15. What value will come in place of question mark (?) in the following question?
 $(9^2 \times 27 + 3^3 \times 7 + ?)^{\frac{1}{2}} = 59$
(A) 1090 (B) 1111
(C) 1105 (D) 1087
(E) 1102
16. What value will come in place of question mark (?) in the following question?
 $(0.064)^{123} \div 0.16^{47} \times 0.4^{34} \times 0.4^{29} = (0.4)^?$
(A) 320 (B) 341
(C) 338 (D) 350
- (E) 344
17. What value will come in place of question mark (?) in the following question?
 $65\% \text{ of } \sqrt{5041} + 20\% \text{ of } 202 = ? + 241$
(A) -114.85 (B) -109.85
(C) -123.85 (D) -107.85
(E) -118.85
18. What value will come in place of question mark (?) in the following questions?
 $\frac{880}{8} - 4 \times 14 + \sqrt{324} = ?$
(A) 84 (B) 69
(C) 81 (D) 72
(E) 66
19. What value will come in place of question mark (?) in the following questions?
 $(?)^2 + ? + 12^3 = 13^2 + 22^2 + 2715$
(A) 34 (B) 38
(C) 40 (D) 50
(E) 36
20. What value will come in place of question mark (?) in the following question?
 $(9261)^{\frac{1}{3}} + \sqrt[3]{39304} + \sqrt{1024} + 113 = (2 + ?)^3 - 25^2 - 2550$
(A) 16 (B) 15
(C) 11 (D) 10
(E) 13