Subject:Simplification and Approximation

Time:10 Minutes
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Directions (1-5): **निम्नलिखित प्रश्नों में प्रश्नवाचक चिन्ह (?) के स्थान पर क्या अनुमानित मान आएगा? (सटीक मान की गणना करना अपेक्षित नहीं है।)**

Q1. $\frac{150}{17} \times \frac{199}{13} \div \frac{16}{91} = ?$
(a) 650
(b) 700
(c) 770
(d) 820
(e) 850
L1Difficulty 2
QTagsApproximation
QCreatorDeepak Rohilla

Q2. 151.011 – 419.999 + 649.991 = ?
(a) 380
(b) 420
(c) 350
(d) 410
(e) 360
L1Difficulty 2
QTagsApproximation
QCreatorDeepak Rohilla

Q3. 1299 ÷ 19.99 × 25.01 + 400.01 = ?
(a) 2025
(b) 2300
(c) 1925
(d) 2200
(e) 1700
L1Difficulty 2
QTagsApproximation
QCreatorDeepak Rohilla

Q4. $\sqrt{5183.98} \div \sqrt{36} = ?$
(a) 21
(b) 6

(c) 12
(d) 18
(e) 26
L1Difficulty 2
QTagsApproximation
QCreatorDeepak Rohilla

Q5. $48.01 \times 34.9 \div 2.95 = ?$
(a) 576
(b) 591
(c) 582
(d) 553
(e) 560
L1Difficulty 2
QTagsApproximation
QCreatorDeepak Rohilla

Directions (6-15): **निम्नलिखित प्रश्नों में प्रश्नवाचक चिन्ह (?) के स्थान पर क्या मान आएगा?**

Q6. 8743 + 486 ÷ 18 × 148 = ?
(a) 13729
(b) 12739
(c) 12729
(d) 13279
(e) 14279
L1Difficulty 2
QTagsSimplification
QCreatorDeepak Rohilla

Q7. 6348 + 8515 – 695 - ? = 4312 + 2162
(a) 7394
(b) 7943
(c) 7439
(d) 7434
(e) 7694
L1Difficulty 2
QTagsSimplification
QCreatorDeepak Rohilla

Q8. 18.6 × 3 + 7.2 – 16.5 = ? + 21.7
(a) 35.7
(b) 21.6
(c) 24.8
(d) 27.6
(e) 33.6

Q9. 56% of 225 + 20% of 150 = ? – 109
(a) 149
(b) 103
(c) 253
(d) 247
(e) 265

Q10. 80% of 650 – 25 % of ? = 60% of 440
(a) 1210
(b) 1024
(c) 1035
(d) 1004
(e) 1008

Q11. 13% of 1100 + 17% of 2100 =? + 26% of 350
(a) 409
(b) 411
(c) 413
(d) 415
(e) 417

Q12. $\frac{1}{3}$ of ? + $\frac{4}{7}$ of $\frac{11}{14}$ of 539 = 31% of 2000
(a) 1234
(b) 1134
(c) 1186
(d) 1143
(e) 1320

Q13. $\sqrt[4]{62,50,000} - \sqrt[3]{3375} = \sqrt{?}$
(a) 1296
(b) 1156
(c) 1369
(d) 1225
(e) 1245
L1Difficulty 2
QTagsSimplification
QCreatorDeepak Rohilla

Q14. $1\frac{2}{5} + 2\frac{1}{7} = ? + 2\frac{1}{2}$

(a) $3\frac{3}{70}$

(b) $3\frac{4}{35}$

(c) $2\frac{3}{70}$

(d) $1\frac{17}{70}$

(e) $1\frac{3}{70}$

L1Difficulty 2
QTagsSimplification
QCreatorDeepak Rohilla

Q15. $\sqrt{3136} + \sqrt{625} = ?^2$
(a) 8
(b) 11
(c) 9
(d) 7
(e)15
L1Difficulty 2
QTagsSimplification
QCreatorDeepak Rohilla

Solutions

S1. Ans.(c)

Sol. $? \simeq \dfrac{150}{17} \times \dfrac{200}{13} \times \dfrac{91}{16}$

$? \simeq 772.05$

$? \simeq 770$

S2. Ans.(a)

$? \simeq 151 - 420 + 650$

$? \simeq 381$

Sol. In options, the nearest value is 380

S3. Ans.(a)

$? \simeq 1300 \div 20 \times 25 + 400$

Sol. $? \simeq 2025$

S4. Ans.(c)

$? \simeq \sqrt{5184} \div \sqrt{36}$

$? \simeq 72 \div 6$

Sol. $? \simeq 12$

S5. Ans.(e)

$? \simeq 48 \times 35 \div 3$

Sol. $? \simeq 560$

S6. Ans.(b)
Sol.
? = 8743 + 27 × 148 =8743 + 3996 = 12739

S7. Ans.(e)
Sol.
14168 – ? = 6474
Or, ? = 14168 – 6474 = 7694

S8. Ans.(c)
Sol.
? = 55.8 + 7.2 – 38.2 = 24.8

S9. Ans.(e)
Sol.
? = 126 + 30 + 109 = 265

S10. Ans.(b)

25% of ? = 520 – 264

Or, ? = $256 \times \frac{100}{25} = 1024$

Sol.

S11. Ans.(a)

? = $13 \times 11 + 17 \times 21 - 26 \times 3.5$

= 409

Sol.

S12. Ans.(b)

$\frac{1}{3} \times ? + \frac{4}{7} \times \frac{11}{14} \times 539 = 31 \times 20$

? = 378×3

= 1134

Sol.

S13. Ans.(d)

$\sqrt{?} = 50 - 15$

= 35

∴ ? = 1225

Sol.

S14. Ans.(e)

? = $(1 + 2 - 2) + \frac{2}{5} + \frac{1}{7} - \frac{1}{2}$

= $1 + \frac{3}{70}$

= $1\frac{3}{70}$

Sol.

S15. Ans.(c)

$?^2 = 56 + 25$

= 81

∴ ? = ± 9

Sol.