Approximation Most Asked Common Questions (Last 5 years)

Directions (1-10): Find the approximate value of (?) in the following questions.

Q1. 44.04% of 349.98 + 205.01% of 140.01 = $(?)^2$
(a) 29
(b) 361
(c) 19
(d) 441
(e) 21

Q2. 125.09 % of 440.01 + 74.98 % of 839.98 + $\sqrt[3]{7.99}$ = 39.89 ×?
(a) 40
(b) 30
(c) 50
(d) 60
(e) 70

Q3. $\frac{?}{14.09} + (11.97)^2 - \sqrt{1936.01} = (15.98)^2$
(a) 2164
(b) 2196
(c) 2118
(d) 2184
(e) 2124

Q4. ?% of 299.71 = $(21.03)^2 + (18.89)^2 + (6.03)^3 + 2.01$
(a) 225
(b) 280
(c) 250
(d) 325
(e) 340

Q5. $(27.02)^2 + 2669 \div 2.98 - 218.9 = 1869.6 - ?$
(a) 470
(b) 420
(c) 510
(d) 540
(e) 500

Q6. 17998÷ 4.99×1.52+ 7199.2 -3448.6 =?
(a) 9250
(b) 9080
(c) 9100
(d) 9150
(e) 9200

Q7. $3599 \div 8.98 + 1244.9 \times 2.98 + (17.99)^2 = ?$
(a) 4400
(b) 4460
(c) 4500
(d) 4550
(e) 4360

Q8. $17.99 + \frac{1}{2.99}$ of $26.99 - \frac{1}{1.99} = ?$
(a) $25\frac{1}{2}$
(b) $26\frac{3}{4}$
(c) $24\frac{1}{2}$
(d) $24\frac{3}{4}$
(e) None of these

Q9. $51.99 \div \frac{1}{1.99}$ of $7.99 + \frac{3}{5} \times 1\frac{2}{3} = ?$
(a) 14
(b) 12
(c) 13
(d) 15
(e) None of these

Q10. $\sqrt[2]{\frac{24.99}{4}} \div \sqrt[3]{\frac{125.08}{8}} + 3\frac{9}{10} = ? - 5\frac{1}{10}$
(a) 14
(b) 10
(c) 8
(d) 12
(e) 15

Solutions

S1. Ans.(e)
Sol. $\frac{44}{100} \times 350 + \frac{205}{100} \times 140 \simeq (?)^2$
$\Rightarrow 154 + 287 \simeq (?)^2$
$\Rightarrow 441 \simeq (?)^2$
$\Rightarrow ? = 21$

S2. Ans.(a)
Sol. $\frac{125}{100} \times 440 + \frac{75}{100} \times 840 + 2 = 40 \times ?$
$550 + 630 + 2 = 40 \times ?$
$? \approx 30$

S3. Ans.(d)

Sol. $\frac{?}{14} + 12^2 - \sqrt{1936} = (16)^2$

$\frac{?}{14} = 256 + 44 - 144$

$\frac{?}{14} = 156$

$? = 2184$

S4. Ans.(e)

Sol. $\frac{?}{100} \times 300 \simeq (21)^2 + (19)^2 + (6)^3 + 2.01$

$? \times 3 = 441 + 361 + 216 + 2$

$? = \frac{1020}{3} = 340$

S5. Ans.(a)

Sol. $(27)^2 + 2670 \div 3 - 219 = 1870 - ?$

$\approx 729 + 890 - 219 = 1870 - ?$

$\approx 1400 = 1870 - ?$

$\approx ? = 1870 - 1400 = 470$

S6. Ans.(d)

Sol. $? \approx 18000 \div 5 \times 1.52 + 7200 - 3450$

$? \approx 3600 \times 1.5 + 3750$

$? \approx 5400 + 3750$

$? \approx 9150$

S7. Ans.(b)

Sol. $? \approx 3600 \div 9 + 1245 \times 3 + 324$

$? \approx 400 + 3735 + 324$

$? \approx 4460$

S8. Ans.(e)

Sol. $? \approx 27 - \frac{1}{2}$

$? \approx 26\frac{1}{2}$

S9. Ans.(a)

Sol. $? \approx 52 \div 4 + \frac{3}{5} \times \frac{5}{3}$

$? \approx 14$

S10. Ans.(b)

Sol.

$\sqrt[2]{\frac{25}{4}} \div \sqrt[3]{\frac{125}{8}} + 3\frac{9}{10} = ? - 5\frac{1}{10}$

$\frac{5}{2} \times \frac{2}{5} + \frac{39}{10} + \frac{51}{10} = ?$

$? = \frac{10+39+51}{10}$

$? = 10$