Zeta Placement Test

To receive the full benefit of this test, watch the student to ensure he has mastered all of the basic operations, fractions, decimals and percents.
If he demonstrates proficiency, he is ready to move on to Pre-Algebra.
If he struggles with decimals and percents, he should begin working in Zeta.
If he struggles with fractions, he should start in Epsilon.

Add or subtract the decimal numbers.

1) $\begin{array}{r} 7.52 \\ -\ 1.85 \\ \hline \end{array}$

2) $\begin{array}{r} 6.0 \\ +\ 5.28 \\ \hline \end{array}$

3) $\begin{array}{r} 32.041 \\ -\ .596 \\ \hline \end{array}$

Multiply the decimal numbers.

4) $\begin{array}{r} 2.49 \\ \times\ \ \ .6 \\ \hline \end{array}$

5) $\begin{array}{r} 1.7 \\ \times\ \ \ 3 \\ \hline \end{array}$

6) $\begin{array}{r} .004 \\ \times\ .05 \\ \hline \end{array}$

Change each fraction to a decimal and then to a percent.

7) $\dfrac{8}{10}$ = _____ = _____ %

8) $\dfrac{5}{6}$ = _____ = _____ %

Divide to the thousandths place, then round to the nearest hundredth.

9) $4\,\overline{)\,13.3\,}$

10) $7\,\overline{)\,4.58\,}$

Divide until you see a pattern, and write the answer with a line over the repeating portion.

11) $.6\,\overline{)\,39.4\,}$

12) $.03\,\overline{)\,.022\,}$

Divide to the hundredths place, then write the remainder as a fraction.

13) $11\,\overline{)\,9\,}$

14) $9\,\overline{)\,5\,}$

15) Fritha has $4.75 and Rachel has $6.29. Do they have enough money to buy a new game that costs $11.00?

16) Joel drove 642 kilometers yesterday. A kilometer is about .6 of a mile. How many miles did Joel drive yesterday?

17) Kyle bought a meal that cost $15.96 and left a 15% tip. What was the total cost of the meal with the tip. (Round your answer to the nearest cent.)

18) Ken has collected 25 baseball cards. His goal is to have 400% of that number. How many cards does he hope to collect in all?

19) Julianne ordered items from a catalog. They cost $25.60, $11.19 and $45.21. Shipping is 8% of the cost and tax is 3% of the cost. What is the total amount Julianne has to pay for her order?

20) Paul walked 27.3 miles. He stopped to rest every 9.1 miles. How many times did he stop? (Your answer will include his last stop at the end of the walk.)

21) Debra has $66.36. How many items can she buy that cost $3.16 apiece?

Solutions

1) 5.67
2) 11.28
3) 31.445
4) 1.494
5) 5.1
6) .0002
7) .80 = 80%
8) $.83\frac{1}{3} = 83\frac{1}{3}\%$
9) 3.33
10) .65
11) $65.\overline{6}$
12) $.\overline{73}$
13) $.81\frac{9}{11}$
14) $.55\frac{5}{9}$
15) yes
16) 385.2
17) $18.35
18) 100
19) $91.02
20) 3
21) 21