Significant Figures Practice Worksheet Name: Key

Determine the number of significant figures in each of the following numbers.

1) 5.432 4
2) 40.319 5
3) 146 3
4) 3.285 4
5) 0.189 3
6) 429.3 4
7) 2873.0 5
8) 99.9 3
9) 0.000235 3
10) 144 3
11) 2500 2
12) 2500.0 5
13) 1.04×10^{14} 3
14) 3.58×10^{-9} 3
15) 48.57193 7
16) 8365.6 5
17) 0.002300 4
18) 7.500×10^{8} 4
19) 3.92×10^{-4} 3
20) 1.000×10^{3} 4

Perform the following operations and report your answer to the proper number of significant digits.

21) 12 + 0.031 + 7.969 = 20 20.
22) 0.085 + 0.062 + 0.14 = 0.287 0.29
23) 3.419 + 3.912 + 7.051 + 0.00013 = 14.38213 14.382
24) 30.5 + 16.82 + 41.07 + 85.219 = 173.609 173.6
25) 143.0 + 289.25 + 68.45 + 6.00 = 506.7 506.7
26) 41.025 – 23.38 = 17.645 17.65
27) 289- 43.7 = 245.3 245
28) 145.63- 28.9 = 116.73 116.7
29) 62.47 – 39.9 = 22.57 22.6
30) 40.008 – 29.094 = 10.914 10.914
31) 29.49 + 83.46 + 107.05 + 26.618 = 246.618 246.62
32) 0.0653 + 0.08538 + 0.07654 + 0.0432 = 0.27042 0.2704
33) $1.8 \times 10^{-5} + 3.25 \times 10^{-4} + 4.6 \times 10^{-5}$ = 0.000389 0.00039
34) 63.489 + 126.2 + 68.85 + 12.05 = 270.589 270.6
35) $2.3 \times 10^{2} + 4.62 \times 10^{2} + 3.852 \times 10^{2}$ = 1077.2 1100

Significant Figures Practice Worksheet Name: Key

Perform the following operations and report your answer to the proper number of significant digits.

36) 2.89 x 4.01 = 11.5889 11.6

37) 17.3 x 6.2 = 107.26 110

38) 3.08 x 1.2 = 3.696 3.7

39) 5.00 x 7.3216 = 36.608 36.6

40) 20.8 x 123.1 = 2560.48 2560

41) 5 x 5 = 25 30

42) 5.0 x 5 = 25 30

43) 5.0 x 5.0 = 25 25

44) 4.8×10^{2} x 2.101×10^{3} = 1008480 1.0×10^{6}

45) 9.13×10^{-4} x 1.2×10^{-3} = 0.000001096 0.0000011

46) 4.218 x 6.5 = 27.417 27

47) 150.0 x 4.00 = 600 600.

48) 282.2 x 3.0 = 846.6 850

49) 1.4×10^{-8} x 3.25×10^{-6} = 0.00000000000000455 or 4.55×10^{-14} 0.000000000000046 or 4.6×10^{-14}

50) 2.865×10^{4} x 1.47×10^{3} = 42115500 42100000

51) 8.071 / 4.216 = 1.914373814 1.914

52) 109.3758 / 5.813 = 18.81572338 18.82

53) 24789.4 / 43.5 = 569.8712644 570.

54) 6.058 / 0.85 = 7.127058824 7.1

55) 4.819 / 9.852 = 0.489139261 0.4891

56) 139.4482 / 68.75 = 2.028337455 2.028

57) 4.23 / 18.941 = 0.223325062 0.223

58) 85.621 / 8.05 = 10.63614907 10.6

59) 6.023×10^{14} / 5.813×10^{12} = 103.6125925 103.6

60) 1.142×10^{-8} / 8.5×10^{-4} = 0.000013435 0.000013