

Answer Key Significant Figures Worksheet

1. $1.267 \times 42 \times 0.9963 = 53$ (2 SF in 42)
2. $4.993 \times 10100 \times 7 = 400,000$ (353005.1 rounded to 1 SF because of the 7)
3. $(63.7 \times 49) / 6.664 = 470$ (468.3823529 rounded to 2 SF from the 49)
4. $\sqrt{7.43} = 2.73$ (Same number of SF as 7.43)
5. $10 + 70 + 3 + 100 = 200$ (183 rounded to the one hundred's place from 100)
6. $0.00627 + 0.1956 + 0.00029 = 0.2022$ (rounded to the 1/10,000th place)
7. $49.642 - 48.995 = 0.647$ (1/1000th place the least significant place (lsp))
8. $(4 \times 972) + (76.4 \times 29.3) - (12 \times 7) = 6000$ (1000's place is the lsp)
9. $\frac{(72.67 - 72.63) \times (4.2694)}{(9.72 + 0.01)} = 0.02$ (1 SF in result of 1st subtraction)
10. $\frac{\overline{4000} \times \overline{2000}}{6.3 \times 10^7} = 0.13$ (2 SF in 6.3×10^7)
11. $\frac{4.1 \times 10^{-3} - 6.9 \times 10^{-2}}{7.2 \times 10^{-6} + 8.943 \times 10^4} = -7.3 \times 10^{-7}$ (2 SF from subtraction)
12. $\frac{\overline{10,000,000} \times 0.0003845 \times 4.55}{4.331 \times 10^{-6}} = 4.0 \times 10^9$ (2 SF in $\overline{10,000,000}$)