

Write the Ksp expression for the following:

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|---------------------------------|----------------------------------|
| 1) AlPO_4 | 4) AgCN |
| 2) $\text{Cu}_3(\text{PO}_4)_2$ | 5) $\text{Zn}_3(\text{AsO}_4)_2$ |
| 3) CuSCN | 6) $\text{Mn}(\text{IO}_3)_2$ |

Given the following solubilities, calculate the solubility product (Ksp) to each compound.

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|-----------------------------|-----------------------------------|
| 7. AgNO_3 | 1.55 g/L |
| 8. SrCO_3 | $7.5 \times 10^{-5} \text{ M}$ |
| 9. BaC_2O_4 | $9.3 \times 10^{-5} \text{ g/ml}$ |
| 10. CuCl | $1.01 \times 10^{-3} \text{ M}$ |

Given the following Ksp values, calculate the solubility of each compound in the units given.

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|------------------------------|-------------------------------------|---------|
| 11. PbC_2O_4 | $\text{Ksp} = 2.74 \times 10^{-11}$ | (mol/L) |
| 12. AgBrO_3 | $\text{Ksp} = 5.77 \times 10^{-15}$ | (g/L) |
| 13. CuS | $\text{Ksp} = 8.5 \times 10^{-45}$ | (mol/L) |
| 14. CaSO_4 | $\text{Ksp} = 2.45 \times 10^{-5}$ | (g/L) |