

#74885



$$K_{sp} = 2.6 \times 10^{-13}$$

$\text{Mn}(\text{OH})_2$



$$K_{sp} = (s)(2s)^2$$

$$2.6 \times 10^{-13} = 4s^3$$

$$\frac{2.6 \times 10^{-13}}{4} = s^3$$

$$s = 0.65 \times 10^{-13}$$

$$s = 6.5 \times 10^{-14}$$

$$s = 6.5 \times 10^{-15}$$

$$s = 4 \times 10^{-5}$$



$$\{\text{OH}^-\} = 2 \times 4 \times 10^{-5}$$
$$= 8 \times 10^{-5}$$

$$\text{pOH} = -\log 8 \times 10^{-5}$$

$$= 5 - \log 8$$

$$\text{pOH} = 5 - 90$$

$$= 4.09$$

$$\text{pH} + \text{pOH} = 14$$

$$\text{pH} = 14 - 4.09$$

$$\boxed{\text{pH} = 9.903} \in \text{H}^+$$