Name: Date: Period: Seat #: Diprotic Acids Sulfurous acid, H ₂ SO ₃ , is a diprotic acid. Write the step-wise dissociation equations for H ₂ SO ₃ .	Dougherty Valley HS AP Chemistry Acid Base Equilibrium			S-78
Diprotic Acids Sulfurous acid, H ₂ SO ₃ , is a diprotic acid. Write the step-wise dissociation equations for H ₂ SO ₃ . $K_{a1} = 1.5 \times 10^{-5}$ $K_{a2} = 1.0 \times 10^{-7}$ Lewis Acids and Bases Consider the following picture. The Lewis acid is The Lewis base is H F G F	Vame:	Date:	Period:	Seat #:
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Lewis Acids and Bases Consider the following picture. The Lewis acid is The Lewis base is H F H F H F H F H F H F H F H F Consider the equation: H ⁺ + OH ⁻ → H ₂ O. The Lewis acid is The Lewis base is Strengths of Acids Consider the acids: HClO ₂ , HBrO ₂ , HIO ₂ . Rank them from weakest to strongest. Weakest Strongest ustification: Strongest Consider the acids: HBrO, HBrO ₂ , HBrO ₃ . Rank them from weakest to strongest. Weakest Strongest ustification: Strongest		<u> </u>	$K_{a1} = 1.5$	5×10^{-5}
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Diprotic Acid Calculations What is the $[SO_3^{2-}]$ in a 0.150 <u>M</u> solution of H₂SO₃?

Calculate the pH of a 0.150 M solution of H₂SO₃.