



TVS TEACHER TRAINING ACADEMY
WORKSHEET

Acids and Bases Strength

Write True (T) or False (F).

- Stronger acids have weaker conjugate bases and weaker acids have stronger conjugate bases. ____
- Stronger bases have stronger conjugate acids and weaker bases have weaker conjugate acids. ____

Write equations that show how the following reactions occur in water.

- F^- acts as a base. _____
- HNO_2 acts as an acid. _____
- $Fe(H_2O)_6^{3+}$ acts as an acid. _____
- HCO_3^- acts as a base. _____
- HCO_3^- acts as an acid. _____
- $Al(H_2O)_5(OH)^{2+}$ acts as a base. _____

What volume of 0.45 M LiOH would be needed to neutralize 60.0 mL of 0.15 M HI?

Calculate the pH values of the following solutions of strong acids and bases.

- 0.001 M HCl
- 0.76 M KOH
- 2.8×10^{-8} M $Ba(OH)_2$