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HONORS WORKSHEET 3g: Nomenclature of acids

There is more than one way to define an acid, but in TOPIC 3 we will define it as a compound that is formed when an anion (a negative ion) has hydrogen ions (H^+) added to it so the charge becomes neutral.

There are two types of acid nomenclature that you will see in this TOPIC; binary acids formed when a simple, monatomic ion has hydrogen ions added and polyatomic (oxoacids) formed when polyatomic ions containing oxygen have hydrogen ions added.

1. Write the formula of each of the following acids. (14)

   (a) Nitric acid

   (b) Chloric acid

   (c) Hydrochloric acid

   (d) Sulfurous acid

   (e) Chlorous acid

   (f) Hydrobromic acid

   (g) Phosphoric acid

   (h) Nitrous acid

   (i) Perchloric acid

   (j) Hydrofluoric acid

   (k) Perbromic acid

   (l) Sulfuric acid

   (m) Bromic acid

   (n) Hypoiodous acid

2. Name the following acids. (14)

   (a) $HClO_3$

   (b) H_3PO_4

   (c) HI

   (d) H_2SO_3

   (e) HNO_3

   (f) HF

   (g) $HC_2H_3O_2$

   (h) HBr

   (i) H_3PO_3

   (j) HClO

   (k) H_2CO_3

   (l) H_2SO_4

   (m) $HBrO_2$

   (n) HNO_2