pH and pOH　　　　　　　　　　　　　　Name: _____

Write a dissociation equation for each compound and calculate the pH and pOH of each solution.

1. 0.010 M HCl	pH = _____ pOH = _____
2. 0.0010 M NaOH	pH = _____ pOH = _____
3. 0.050 M Ca(OH)$_2$	pH = _____ pOH = _____
4. 0.030 M HBr	pH = _____ pOH = _____
5. 0.015 M KOH	pH = _____ pOH = _____
6. 2.0x10^{-4} M HIO$_4$	pH = _____ pOH = _____
7. 1.2x10^{-3} M LiOH	pH = _____ pOH = _____
8. 5.0x10^{-4} M H$_2$SO$_4$	pH = _____ pOH = _____
9. 0.50 M HNO$_3$	pH = _____ pOH = _____
10. 0.040 M Ba(OH)$_2$	pH = _____ pOH = _____

(1) Acids: Write the formula or name each acid.

(a)

(a)	F^-	Cl^-					P^{3-}
H^+	ex. HF		HBr			H_3N	
name no oxygen → hydro_____ ic	ex. **hydro**<u>fluor</u>**ic** acid			hydroiodic acid	hydrosulphuric acid		

(b)

(b)	$C_2H_3O_2^-$	ClO_3^-					PO_4^{3-}
polyatomic ion	acet**ate**			cyanate		nitrate	
H^+	$HC_2H_3O_2$		$HBrO_4$				
name ate → ic	ex. acet**ic** acid				sulphuric acid		

(c)

(c)	IO_2^-	ClO_2^-					PO_3^{3-}
polyatomic ion	iod**ite**			hypoiodite		nitrite	
H^+	HIO_2		$HBrO_2$				
name ite → ous	iod**ous** acid				sulphurous acid		

(2) Bases: Write the formula or name each base

	Na^+	Li^+			Sr^{2+}		Al^{3+}
OH^-	ex. NaOH			$Ca(OH)_2$			
name	ex. sodium hydroxide		potassium hydroxide			barium hydroxide	