

Expression Evaluation

- i) Infix Form $a \pm b$ (Operator between operands)
 ii) Prefix Form (Polish) $+ a b$ (" before ")
 iii) Postfix Form (Reverse Polish) $a b +$ (" after ")

Operator Prece.

1. $()$
 2. $^$
 3. $*/\%$
 4. $+ -$
- ① $a + * b c$
 ② $a + d$
 ③ $+ a d$
 ④ $+ a * b c$

$$d = * b c$$

$$(a+b) / (c-d) * f$$

① $+ a b / (c-d) * f$

② $g / (c-d) * f$ $g = + a b$

③ $g / - c d * f$

④ $g / h * f$ $h = - c d$

⑤ $g h * f$

⑥ $i * f$ $i = g h$

⑦ $* i f$

⑧ $* / g h f$

⑨ $* / + a b - c d f$

Infix to Postfix

$$a + b * c$$

- ① $a + b c *$
 ② $a + d$
 ③ $a d +$
 ④ $a b c * +$

$$d = b c *$$

$$(a+b) / (c-d) * f$$

① $a b + / (c-d) * f$
 ② $g / (c-d) * f$ $g = a b +$

③ $g / c d - * f$

④ $g / h * f$ $h = c d -$

⑤ $g h / * f$

⑥ $i * f$ $i = g h /$

⑦ $i f *$

⑧ $g h / f *$

⑨ $a b + c d - / f *$

① $a * b ^ c$

② $(a * b) ^ (c - d) / f$

③ $(a * b + c) / (c - d * e)$