Functions corresponding to the Components of a BDD

\[ f_1 \]

\[ x \]

\[ y \]

\[ z \]

\[ 1 \]
BDD with Complementated Edges

\[ a \land b \land c \lor \neg a \lor c \lor d \]
Example: A Simple Binary Decision Diagram (BDD)

Model $M: a=T, b=T, c=L, d=T$

$m \wedge f$

Formula representation from $f$:
- Enumerate paths to TRUE

$f = a \wedge b \wedge d \vee a \wedge b \wedge c \vee a \wedge b \wedge e \wedge d \vee a \wedge b \wedge c \wedge d$

Multiplexer Circuit

Diagram of multiplexer circuit with inputs $a$, $b$, $c$, and $d$, and outputs $f$.