Ex.1

$$(((P \lor Q) \Rightarrow R) \land (R \lor (P \land \neg Q))) \land \neg R$$

Translate the implication to an or-clause:

$$((\neg(P \lor Q) \lor R) \land (R \lor (P \land \neg Q)))\neg R$$

De Morgan:

$$(((\neg P \land \neg Q) \lor R) \land (R \lor (P \land \neg Q))) \land \neg R$$

Remove contradicting statements (($\neg P \land \neg Q$) and ($P \land \neg Q$) can never be true at the same time)):

$$(R \land R) \land \neg R$$

A literal AND the same literal is the same as just writing the literal:

$$R \land \neg R$$

We are ending up with a contradiction.

Ex.2

Action(Go(x,y,r)),
  PRECOND: $At(Shakey, x) \land In(x, r) \land In(y, r)$
  EFFECT: $At(y, Shaky) \land \neg At(x, Shaky)$

Action(Push(b,x,y,r)),
  PRECOND: $At(b, x) \land In(x, r) \land In(y, r) \land In(Shakey, r) \land \neg At(Shakey, x) \land Box(b)$
  EFFECT: $At(b, y) \land \neg At(b, x)$

Action(ClimbUp(x,b)),
  PRECOND: $In(b, r) \land In(x, r) \land At(Shakey, x) \land \neg At(b, x) \land On(Shakey, Floor)$
  EFFECT: $\neg On(Shakey, Floor) \land On(Shakey, b)\neg At(Shakey, x)$

Action(ClimbDown(b,x)),
  PRECOND: $In(x, r) \land In(b, r) \land \neg At(b, x) \land On(Shakey, b)$
  EFFECT: $\neg On(Shakey, Floor) \land On(Shakey, b)\neg At(Shakey, x)$