Translating from English to Logic:

1) What is my domain?
2) What are my quantifiers?
3) What are my predicates?
4) Build it up

P(x) is "x is happy" Q(x) is "x sleeps 8 hours"

$\forall x.\left[P(x) \rightarrow Q(x)\right]$ Every person that is happy sleeps 8 hours

P(a) = T, Q(a) =T
~~P(a) = T, Q(a) =F~~ This possibility is ruled out
P(a) = F, Q(a) =T
P(a) = F, Q(a) =F

$\forall x.\left[P(x) \wedge Q(x)\right] \equiv \forall x.P(x) \wedge \forall x'.Q(x')$ Every person is happy and sleeps 8 hours

P(a) = T, Q(a) =T
~~P(a) = T, Q(a) =F~~
~~P(a) = F, Q(a) =T~~
~~P(a) = F, Q(a) =F~~

$\forall x.\left[P(x) \vee Q(x)\right]$ Every person is happy or sleeps 8 hours

P(a) = T, Q(a) =T
P(a) = T, Q(a) =F
P(a) = F, Q(a) =T
~~P(a) = F, Q(a) =F~~

Example:
Translate "Some happy people do not sleep 8 hours a night." into predicate logic

1) people
2) Some
3) P(x) is "x is happy" Q(x) is "x sleeps 8 hours"
4) $\exists x.\mathrm{P}(x) \wedge \neg Q(x)$ where x is a person