

Re: [Q]: List of all possible reductions between NP problems

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NPC wrote:

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We use reductions to prove that a problem is NP-Complete by reducing a
known
NP-complete problem to it. Once we prove that a problem 'A' is
NP-complete by
reducing an NP-complete problem 'B' which is already known.....the two
problems will be in the same class.
```

Almost. We have also have to show A is in NP.

For example:

```
SAT<=p CNF
CNF<=p Clique
```

Is there a web resource that explain in detail all the possible polynomial reductions between the different problems?

Of course not. If we could even determine the existence of a polynomial reduction from SAT to 'not-the-empty-string', we'd have an answer to P ?= NP.

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--Bryan
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