

1. For the conditional statements below,

- (a) Identify the hypothesis and conclusion. (Underlining and labelling each is fine.)
- (b) Indicate whether the statement is true or false.

[2] i. If $7 > 10$, then Stephen Harper will be Prime Minister For Life.

[2] ii. If 4 is even, then 10 is odd.

[2] iii. If $2 + 2 = 4$, then $6 - 5 = 1$.

2. Prove the following statement:

[4] If n is an even integer and m is any integer, then nm is an even integer.

(You can use either a two-column proof or paragraph form.)