

1 State precisely (but concisely) in your own words what it means for an argument to be valid.

An argument is considered valid if its premises and conclusion are logically sound.

2 Prove (or disprove).

$$\forall n \in \mathbb{Z}, n \geq 3 \rightarrow \sum_{i=3}^n i(i-1) = \frac{(n-2)(n^2+2n+3)}{2}$$