EPGY 2013 Artificial Intelligence: Assignment 6 Lab 2: Algorithms - LaTeX

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Questions

1. Prove by induction that

$$\sum_{i=1}^{n}(2i - 1) = n^2$$

2. Consider the following recurrence:

$$
\begin{aligned}
T(n) &= T\left(\frac{n}{2}\right) + n, \text{where } n \text{ is a power of 2} \\
T(1) &= 1
\end{aligned}
$$

   (a) Find an exact closed form expression for $T(n)$.

   (b) Prove by induction that the answer you gave in (a) is coronet.

Solutions

1. ⟨ Your answer here ⟩

2. (a) ⟨ Your answer here ⟩

   (b) ⟨ Your answer here ⟩