SE120 - Discrete Structures II
Test 4 - Solutions
Friday 7 May 2004, 11:00, Lab4

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1. $f : \mathbb{N} \rightarrow B, f(x) = -2x - 1$ [**1 mark**]
   $g : B \rightarrow \mathbb{N}, g(x) = (x + 1)/(-2)$ [**1 mark**]

2. $f : \mathbb{N} \rightarrow A, f(x) = (x \times 10) + 7$ [**1.5 marks**]
   $g : A \rightarrow \mathbb{N}, g(x) = \text{floor}(x/10)$ [**1.5 marks**]

   or

   $A \subset \mathbb{N}$ and $\mathbb{N}$ is countable, therefore A must be countable [**3 marks**]