compose_increasing[11,40]

$\forall k,m{:}\mathbb{N},\ f{:}(\text{int\_seg}(0;\ k)\rightarrow\text{int\_seg}(0;\ m)),\ g{:}(\text{int\_seg}(0;\ m)\rightarrow \mathbb{Z}).$
$\text{increasing}(f;\ k) \Rightarrow \text{increasing}(g;\ m) \Rightarrow \text{increasing}(\text{compose}(g;\ f);\ k)$