Algebra II Practice A.APR.B.2: Remainder and Factor Theorems www.jmap.org

1. The design for a new ski slope can be modeled by $y=-x^{3}+17 x^{2}-110 x+400$. Use division to prove that $x=10$ is a real root of this function.

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$\left(-x^{3}+17 x^{2}-110 x+400\right) \div(x-10)=-x^{2}+7 x-40$ with no remainder, so $x=10$ is a real root of the [1] function.

