King **F**ahd **U**niversity for **P**etroleum and **M**inerals
Department of Mathematics & Statistics

Term 152 Math 102 () Quiz#2 (55, 6.1, 6.2, and 6.3)

Family Name: S.r#

Q1. $\int_0^1 \frac{x}{\sqrt{1+x}}\,dx$

Q2. Use **Cylindrical Shell** method to **set up an integration** for the volume generated by rotating the region enclosed by $y=-\sqrt{x},\ x=1,\ y=0$ about $y=-1$.

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Term 152 Math 102 (8) Quiz#2 (Area Between Curves + Ch6)
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Q1. $\int x(2x-1)^9\,dx$

Q2. **Set up** an integral for the volume of the described solid;

The base is bounded by $y=e^x$, $y=1$, and $x=1$. Cross sections perpendicular to the $x-$axis are semi-circles.