King Fahd University for Petroleum and Minerals Department of Mathematics & Statistics

Term 142 Math 102 (24) Quiz #4 (8.3, 8.4 & 8.7)

Family Name: S.r#

Q1. $\int \frac{x^2 + 7x}{(1 - x^2)(x + 1)} dx$

 $Q2. \int \frac{dx}{x\sqrt{x^2+7}}$

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Term 142 Math 102 (7) Quiz #4 (8.3, 8.4 & 8.7)

Family Name: S.r#

Q1. $\int \frac{x^2 + 2x + 1}{(x^2 + 4)^2} dx$

 $Q2. \int_{-1}^{0} \frac{dx}{x^2}$

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Term 142 Math 102 (28) Quiz #4 (8.3, 8.4 & 8.7)

Family Name: S.r#

Q1.
$$\int \frac{x^3 + x^2 + 4x + 2}{\left(2 + x^2\right)^2} dx$$

Q2. Does $\int_{2}^{\infty} \frac{x^2 + x + 1}{x^3 - x - 1} dx$ converge or diverge? (**Hint:** it is easier to use a test!)