

Quiz 16, Math 372

10/28/25

Simplify #1 and #2:

1) $(49)^{3/2}$

2) $\left(\frac{1}{16}\right)^{7/4}$

3) Simplify and rewrite without a negative exponent: $(x^3)^{-2/3}$

4) Rewrite with a single 13:

$$13(\sqrt[3]{13})$$

5) Simplify: $\frac{(\sqrt{x^2+1})^3}{\sqrt{x^2+1}}$

Ans

1) 343

2) $\frac{1}{128}$

3) $\frac{1}{x^2}$

4) $13^{4/3}$

5) $x^2 + 1$