

Practice Quiz for 8-30-17

[1] Graph each interval on a number line.

[a] $(2,5]$

[b] $(-\infty,2)$

[c] $[-1,1]$

[2] Evaluate each expression.

[a] $100^{\frac{3}{2}}$

[b] 9^{-2}

[c] $\left(\frac{8}{27}\right)^{-\frac{1}{3}}$

[3] Simplify each expression. Do not leave any negative exponents in your final answer.

[a] $(ab^2)^{-3}(a^{-1}b^3)^4$

[b] $\frac{2x^2y}{9xy^{-3}} \cdot \frac{3x^{-4}}{8y^{-1}}$

[4] Perform the operation and simplify your answers.

[a] $\frac{x^2+5x+6}{x^2-16} \cdot \frac{x^2-3x-4}{x^2+3x+2}$

[b] $\frac{x^2-9}{x^2+3x+2} \div \frac{x+3}{x+2}$

[c] $1 - \frac{x}{x+2}$