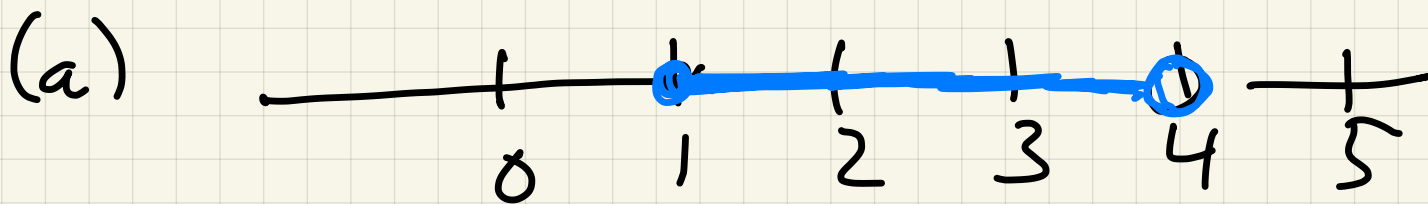


Quiz 1

#1 $\{x: 1 \leq x < 4\}$



(b) $[1, 4)$

#2 $\left| \frac{1}{3} - \frac{2}{5} \right| = \left| \frac{5}{15} - \frac{6}{15} \right| = \left| \frac{-1}{15} \right| = \frac{1}{15}$

#3 (a) $\left(\frac{3x^2}{y^3} \right) \left(\frac{2x^2}{x} \right)^3 = \frac{3x^2}{y^3} \cdot \frac{8x^6}{x^3} =$

$$\frac{24x^5}{y^3}$$

(b) $\frac{8}{3-\sqrt{13}} \cdot \frac{(3+\sqrt{13})}{(3+\sqrt{13})} = \frac{8(3+\sqrt{13})}{9-13} =$

$$\frac{8(3+\sqrt{13})}{-4} = -2(3+\sqrt{13})$$