

Quiz 2 12/40 1/30

$$1. \frac{\frac{3}{7}}{\frac{4}{5}}$$

$$= \frac{15}{28}$$

2. Find the Domain

$$\frac{4x+1}{x-2}$$

$$D: (-\infty, 2) \cup (2, \infty)$$

3. $|3x+1|-3 < 4$

$$|3x+1| < 7$$

$$-7 < 3x+1 < 7$$

$$-8 < 3x < 6$$

$$-\frac{8}{3} < x < 2$$

interval $(-\frac{8}{3}, 2)$

$$4. \frac{x^2+3x-18}{x^2-4} \cdot \frac{x^2-2x-3}{x^2+2x-24}$$

$$= \frac{(x-6)(x-3)(x-3)(x+1)}{(x-2)(x+2)(x-6)(x-4)}$$

$$= \frac{(x-3)^2(x+1)}{(x-2)(x+2)(x-4)}$$