To simplify rational expressions, factor the numerator and denominator. Separate the like factors from the others, and simplify fractions with equal numerators and denominators to 1.

$$\frac{40x^4}{25x} = \frac{2 \cdot 2 \cdot 2 \cdot 5 \cdot x \cdot x \cdot x \cdot x}{5 \cdot 5 \cdot x}$$

$$= \frac{5}{5} \cdot \frac{x}{x} \cdot \frac{2 \cdot 2 \cdot 2 \cdot x \cdot x \cdot x}{5} = 1 \cdot \frac{2 \cdot 2 \cdot 2 \cdot x \cdot x \cdot x}{5} = \frac{8x^3}{5}$$