$\frac{x^2-6x+8}{4x^2+8x-32} = \frac{(x-4)(x-2)}{4(x-2)(x+4)}$ so the domain of the expression excludes both x=2 and x=-4. Simplifying the expression, you find that $\frac{(x-4)(x-2)}{4(x-2)(x+4)} = \frac{x-4}{4(x+4)}.$