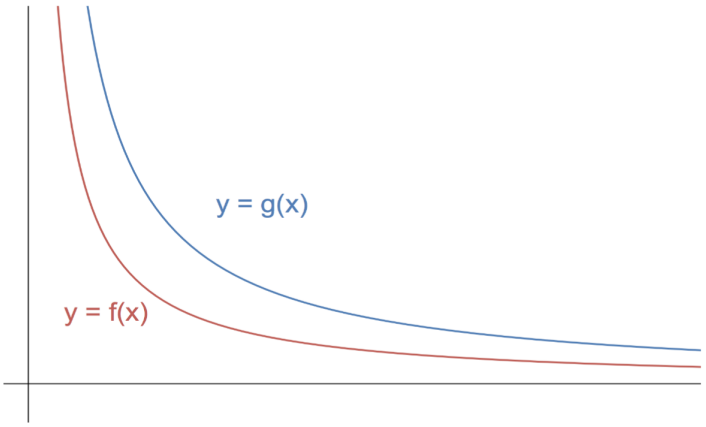
Suppose f and g are continuous on $(0, \infty)$ and $0 \leq f(x) \leq g(x)$.



Answer *CV* (converges), *DV* (diverges), or *could CV or DV* for each:

- If $\int_1^\infty g(x)\,dx$ converges, then $\int_1^\infty f(x)\,dx$:_____
- If $\int_1^\infty f(x)\,dx$ converges, then $\int_1^\infty g(x)\,dx$:_____
- If $\int_1^\infty g(x)\,dx$ diverges, then $\int_1^\infty f(x)\,dx$:_____
- If $\int_1^\infty f(x)\,dx$ diverges, then $\int_1^\infty g(x)\,dx$:_____

- If $\int_0^1 g(x)\,dx$ converges, then $\int_0^1 f(x)\,dx$:_____
- If $\int_0^1 f(x)\,dx$ converges, then $\int_0^1 g(x)\,dx$:_____
- If $\int_0^1 g(x)\,dx$ diverges, then $\int_0^1 f(x)\,dx$:_____
- If $\int_0^1 f(x)\,dx$ diverges, then $\int_0^1 g(x)\,dx$:_____