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2015 6 What is the domain of the function $f(x) = \sin^{-1}(2x)$?

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(A) $-\pi \leq x \leq \pi$

(B) $-2 \leq x \leq 2$

(C) $-\frac{\pi}{4} \leq x \leq \frac{\pi}{4}$

(D) $-\frac{1}{2} \leq x \leq \frac{1}{2}$

D

Use domain of $g(x) = \sin^{-1} x$ is $-1 \leq x \leq 1$:

\therefore domain of $f(x) = \sin^{-1}(2x)$ is $-1 \leq 2x \leq 1$

$$-\frac{1}{2} \leq x \leq \frac{1}{2}$$

State Mean: 0.8

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