Inverse Sine

$$y = \sin^{-1} x$$

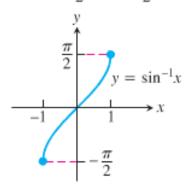
domain is a real number range is an angle

to find the inverse sine of a number, you need to think of the angle whose sine is that number

graph is the section of sine graph from $-\frac{\pi}{2}$ to $\frac{\pi}{2}$, reflected across the line y = x

Domain:
$$-1 \le x \le 1$$

Range: $-\frac{\pi}{2} \le y \le \frac{\pi}{2}$



Inverse Cosine

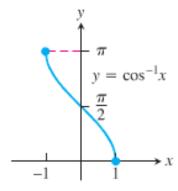
$$y = \cos^{-1} x$$

domain is a real number range is an angle

to find the inverse cosine of a number, you need to think of the angle whose cosine is that number

graph is the section of cosine graph from 0 to π , reflected across the line y = x

Domain: $-1 \le x \le 1$ Range: $0 \le y \le \pi$



Inverse Tangent

$$y = \tan^{-1} x$$

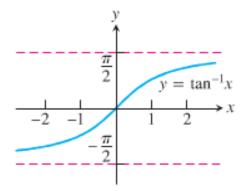
domain is a real number range is an angle

to find the inverse tangent of a number, you need to think of the angle whose tangent is that number

graph is the section of tangent graph from $-\frac{\pi}{2}$ to $\frac{\pi}{2}$, reflected across the line y = x

Domain:
$$-\infty < x < \infty$$

Range: $-\frac{\pi}{2} < y < \frac{\pi}{2}$



Inverse Cotangent

$y = \cot^{-1} x$

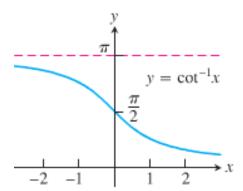
domain is a real number range is an angle

to find the inverse cotangent of a number, you need to think of the angle whose cotangent is that number

graph is the section of cotangent graph from 0 to π , reflected across the line y = x

Domain:
$$-\infty < x < \infty$$

Range: $0 < y < \pi$



Inverse Secant

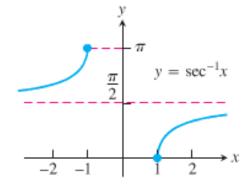
$$y = \sec^{-1} x$$

domain is a real number range is an angle

to find the inverse secant of a number, you need to think of the angle whose secant is that number

graph is the section of secant graph from 0 to π , reflected across the line y = x

Domain:
$$x \le -1$$
 or $x \ge 1$
Range: $0 \le y \le \pi, y \ne \frac{\pi}{2}$



Inverse Cosecant

$$y = \csc^{-1} x$$

domain is a real number range is an angle

to find the inverse tangent of a number, you need to think of the angle whose tangent is that number

graph is the section of tangent graph from $-\frac{\pi}{2}$ to $\frac{\pi}{2}$, reflected across the line y = x

Domain:
$$x \le -1$$
 or $x \ge 1$
Range: $-\frac{\pi}{2} \le y \le \frac{\pi}{2}, y \ne 0$

