

Degrees to radians, radians to degrees

Convert each degree measure into radians.

1)  $\frac{-200^\circ \cdot \pi}{180^\circ} = \frac{10\pi}{9}$

2)  $-210^\circ$

3)  $765^\circ$

4)  $-570^\circ$

5)  $-675^\circ$

6)  $600^\circ$

7)  $330^\circ$

8)  $45^\circ$

9)  $-140^\circ$

10)  $170^\circ$

Convert each radian measure into degrees.

11)  $\frac{19\pi}{18} \cdot \frac{180^\circ}{\pi} = 190^\circ$

12)  $-\frac{9\pi}{4}$

13)  $-\frac{13\pi}{12}$

14)  $\frac{11\pi}{4}$

15)  $\frac{13\pi}{18}$

16)  $-\frac{5\pi}{4}$

17)  $\frac{10\pi}{9}$

18)  $-\frac{59\pi}{18}$

19)  $\frac{\pi}{3}$

20)  $\frac{11\pi}{3}$

$360^\circ = 2\pi \text{ radians}$

$180^\circ = \pi \text{ radians}$

$1^\circ = \frac{\pi}{180^\circ} \text{ radians } (\text{Degrees to Radians})$

$\frac{180^\circ}{\pi} = 1 \text{ radian } (\text{Radians to Degrees})$

Degrees to radians, radians to degrees

Convert each degree measure into radians.

1)  $\frac{-200^\circ \cdot \pi}{180} = \frac{10\pi}{9}$

2)  $\frac{-210^\circ \cdot \pi}{180} = \frac{7\pi}{6}$

3)  $\frac{765^\circ \cdot \pi}{180} = \frac{17\pi}{4}$

4)  $\frac{-570^\circ \cdot \pi}{180} = -\frac{19\pi}{6}$

5)  $\frac{-675^\circ \cdot \pi}{180} = -\frac{15\pi}{4}$

6)  $\frac{600^\circ \cdot \pi}{180} = \frac{10\pi}{3}$

7)  $\frac{330^\circ \cdot \pi}{180} = \frac{11\pi}{6}$

8)  $\frac{45^\circ \cdot \pi}{180} = \frac{\pi}{4}$

9)  $\frac{-140^\circ \cdot \pi}{180} = -\frac{7\pi}{9}$

10)  $\frac{170^\circ \cdot \pi}{180} = \frac{17\pi}{18}$

Convert each radian measure into degrees.

11)  $\frac{19\pi}{18} \cdot \frac{180}{\pi} = 190^\circ$

12)  $-\frac{9\pi}{4} \cdot \frac{180}{\pi} = -405^\circ$

13)  $-\frac{13\pi}{12} \cdot \frac{180}{\pi} = -195^\circ$

14)  $\frac{11\pi}{4} \cdot \frac{180}{\pi} = 495^\circ$

15)  $\frac{13\pi}{18} \cdot \frac{180}{\pi} = 130^\circ$

16)  $-\frac{5\pi}{4} \cdot \frac{180}{\pi} = -225^\circ$

17)  $\frac{10\pi}{9} \cdot \frac{180}{\pi} = 200^\circ$

18)  $-\frac{59\pi}{18} \cdot \frac{180}{\pi} = -590^\circ$

19)  $\frac{\pi}{3} \cdot \frac{180}{\pi} = 60^\circ$

20)  $\frac{11\pi}{3} \cdot \frac{180}{\pi} = 660^\circ$