

More problems for section 4.2 of *Essentials of Precalculus with Calculus Previews* by Zill and Dewar, 5e.

1. Find the sine and cosine of each of the following angles without a calculator, and state your answers in exact form. *Check* your answers on a calculator using $\frac{1}{\sqrt{2}} \approx 0.707$ and $\frac{\sqrt{3}}{2} \approx .866$.

a. -314π

b. 187π

c. $\frac{15\pi}{4}$

d. $\frac{-23\pi}{6}$

e. $\frac{19\pi}{3}$

f. $\frac{-43\pi}{3}$

g. $\frac{17\pi}{2}$

h. $\frac{-19\pi}{4}$

i. $\frac{34\pi}{6}$

j. $\frac{-25\pi}{3}$

k. $\frac{99\pi}{4}$

l. $\frac{-36\pi}{3}$

m. $\frac{45\pi}{2}$

n. $\frac{-117\pi}{6}$

o. $\frac{123\pi}{2}$

p. $\frac{-125\pi}{6}$

q. $\frac{237\pi}{3}$

r. $\frac{-170\pi}{2}$

s. $\frac{142\pi}{6}$

t. $\frac{-159\pi}{2}$