PC - Functions Name_____

More...

Hour____

Find all solutions to each equation in radians.

1) $5 + 3\sin\left(4\theta + \frac{3\pi}{2}\right) = 5 + 5\sin\left(4\theta + \frac{3\pi}{2}\right)$

2) $-2 - 8\cos\left(2\theta + \frac{\pi}{3}\right) = 3\sqrt{3} - 2 - 2\cos\left(2\theta + \frac{\pi}{3}\right)$

Solve each equation for $0 \le \theta < 2\pi$.

3) $-5 - \frac{7}{3} \cdot \sin\left(2\theta + \frac{7\pi}{4}\right) = \frac{-15 + \sqrt{3}}{3} - 3\sin\left(2\theta + \frac{7\pi}{4}\right)$

4) $-4 + 2\cos\left(-3\theta + \frac{\pi}{2}\right) = -3 + \cos\left(-3\theta + \frac{\pi}{2}\right)$

Answers to More...

1) $\left\{-\frac{3\pi}{8} + \frac{\pi n}{4}\right\}$

2) $\left\{\frac{\pi}{4} + \pi n, \frac{5\pi}{12} + \pi n\right\}$

3) $\left\{\frac{7\pi}{24}, \frac{11\pi}{24}, \frac{31\pi}{24}, \frac{35\pi}{24}\right\}$

4) $\left\{\frac{\pi}{6}, \frac{5\pi}{6}, \frac{3\pi}{2}\right\}$