1.2.4

Angle $\cos\theta \quad \frac{P \cdot q}{|P| \cdot |q|}$ $\quad P=(-2,4)$, $q=(3,-5)$

$|P| = \sqrt{(-2)^2+4^2} = \sqrt{20}$

$|q| = \sqrt{3^2+(-5)^2} = \sqrt{34}$

$P \cdot q = -6 + (-20) = -26$

$\text{Angle}(P,q) = \cos\theta \ \frac{-26}{\sqrt{20}\sqrt{34}}$

$= \cos\theta \cdot \frac{-26}{26.07}$

$\approx 176.5^\circ$