

$$4) p = (-2, 4) \quad q = (3, -5)$$

$$p \cdot q = |p| \cdot |q| \cdot \cos \theta$$

$$p \cdot q = -6 - 20 = -26$$

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

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

$$-26 = \sqrt{20} \cdot \sqrt{34} \cdot \cos \theta$$

$$-26 = 2\sqrt{170} \cdot \cos \theta$$

$$-13 = \sqrt{170} \cdot \cos \theta$$

$$\frac{-13}{\sqrt{170}} = \cos \theta$$

$$-0,997 = \cos \theta \rightarrow \underline{\cos \theta}$$

$$175,56^\circ = \theta$$