Phasors 003

Consider the sinusoids:

$$i_1(t) = 12\cos(10t + A_1)$$
$$i_2(t) = 12\sin(10t + A_2)$$

The corresponding phasors are:

$$\mathbf{I_1} = 12e^{jB_1} \quad \text{with } -180° \le B_1 \le 180°$$
$$\mathbf{I_2} = 12e^{jB_2} \quad \text{with } -180° \le B_2 \le 180°$$

Find B_1 and B_2.

Given Variables:

A1 : 35 degrees

A2 : 45 degrees

Calculate the following:

B1 (degrees) :

35 ✓

B2 (degrees) :

-45 ✓

Hint: Convert the sine to cosine first.