TM45 Question 2

The fault current as things stand is

$$\frac{6350}{.78} = 8141 \text{ Amps.}$$

Impedance = $(0.3 + j0.3) + 0.42$

$= 0.72 + j0.3$

$0.78\ \Omega$

We need to Reduce the current to

$$\frac{430}{.72} = 597.22 \text{ Amps}$$

to find the earth path impedance

$$\frac{6350}{597.22} = 10.63\ \Omega$$

What I'm thinking is the correct thing to do Next is to Find the Resistor needed. we subtract our original resistance "0.72" From the "10.63 Ω"

giving us = 9.91 Ω Resistor
(Neutral earthing Resistor)