Reading:	Klann.ReinsComm	(tax effect - easy) Example a-Question
Model:	2017.Spring #26b	
Problem Type:	change in taxable income - easy version	

Given   The following pertains to a reinsurance contract that was commuted:

quota-share percentage	45%	
primary insurer RESERVE direct(gross)	1,360,000	$=$ $_pR^-_{gross}$

discount factor for primary insurer	0.910
discount factor for reinsurer	0.850

REINSURER'S <u>carried</u> loss reserves (prior to commutation)
are higher than the INSURED'S carried reserves by: 5%

commutation price   739,260

Find   change in taxable income for both insurer and reinsurer due to the commutation

Notation

price	$=$	commutation price
$_pR^-_{ceded}$	$=$	CEDED carried reserve for primary insurer
$_{re}R^-_{gross}$	$=$	GROSS carried reserve for reinsurer
d_1	$=$	discount factor for primary insurer
d_2	$=$	discount factor for reinsurer

Formulas

change in taxable income for primary insurer	$=$	price $- (_pR^-_{ceded})$ x d_1
change in taxable income for reinsurer	$=$	$(_{re}R^-_{gross})$ x d_2 - price

insurer = 182,340 *(increase)*   (tax effect - easy)   Example b-Answer

reinsurer = -193,050 *(decrease)*

45% quota-share reinsurance means that 45% is CEDED to reinsurer:

$_pR^{-}_{ceded}$	=	$_pR^{-}_{gross}$	x	**qs%**		
	=	1,360,000	x	45%	=	612,000
$_{re}R^{-}_{gross}$	=	$_pR^{-}_{ceded}$	x	1.05		
		612,000	x	1.05	=	642,600

We now have what we need to substitute into the formulas for change in taxable income:

change in taxable income for primary insurer   =   182,340 *(increase)*

change in taxable income for reinsurer   =   -193,050 *(decrease)*