12. (6 points)

The following excerpts are from an insurance company's 2013 Annual Statement (all figures are in thousands of dollars):

	Current Year	Prior Year
Direct written premiums	300,000	
Direct unearned premiums	186,000	31,200
Direct losses paid	64,000	
Direct losses unpaid	89,000	59,600
Direct LAE paid	17,500	
Direct LAE unpaid	32,200	11,100
Other underwriting expenses paid	35,400	
Other underwriting expenses unpaid	1,500	600
Investment expenses incurred	10	
Total gross investment income earned during the year	4,270	
Net realized capital gain (loss)	3,400	1,830
Change in unrealized capital gain (loss)	-4,600	7,900
Nonadmitted assets	900	700
Surplus as regards policyholders		80,400

a. (3 points)

Assume the company wrote annual policy terms and neither assumed nor ceded any business. Calculate the company's policyholders' surplus as of December 31, 2013. Ignore federal income taxes.

b. (2.25 points)

Assume instead the company had entered into a quota share reinsurance agreement with an unaffiliated company on January 1, 2013. The contract applied to all business written during 2013 and had a fixed ceding commission of 32%.

The company expected its policyholders' surplus as of December 31, 2012 to grow in 2013 by the amount of ceding commission, and the quota share percentage was selected so that the company's expected 2013 IRIS ratio 2 would be reduced to 300%.

Calculate the company's expected 2013 IRIS ratio 4 (surplus aid to policyholders' surplus) and discuss how a regulator might respond to the result.

c. (0.75 point)

Assuming the company had purchased the reinsurance contract described in part b. above, identify and describe one disclosure that would have been required in the company's 2013 Notes to the Financial Statements.

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QUESTION: 12	
TOTAL POINT VALUE: 6	**LEARNING OBJECTIVE: C1, C2**
SAMPLE ANSWERS	
Part a: 3 points	

Sample 1:

Current year surplus =prior year surplus + net income + change in unrealized capital gains- change in non-admitted assets

Earned premium= WP – Δ UEPR= 300,000-(186,000-31,200)=145,200

Incurred loss= paid loss + Δ reserves= 64,000+(89,000-59,600)= 93,400

Incurred LAE= paid LAE + Δ LAE reserves=17,500+ (32,200-11,100)= 38,600

Other U/W expenses= 35,400+(1,500-600)= 36,300

Net income= EP- incurred loss – incurred LAE- incurred other U/W expenses- investment expenses incurred +gross investment income earned + realized capital gain= 145,200-93,400-38,600-36,300-10+4,270+3,400= -15,440

*assume gross investment income does not already include capital gains

CY surplus= 80,400+(-15,440)+ (-4,600)- (900-700)= 60,160

Sample 2:

80400+300000-(186000-31200)-64000-(89000-59600)-17500-(32200-11100)-35400-(1500-600)-10+4270+3400-4600-(900-700)=60160

Part b: 2.25 points

Sample 1:

Let Quota Share =x

IRIS Ratio 2= 300000(1-x)/[80400+32%*300000*x]= 300%

X=10% Quota Share

IRIS Ratio 4= 186000*32%*10%/[80400+32%*10%*300000]=6.6%<15%

In normal range, no response by regulator

Sample 2:

Ceding Commission= 32%

Ratio 2: 300%

NWP/PHS=300%

X= ceded premium; 32%*x= commission

PHS= 80,400+32%*x

NWP= 300k-x

NWP/PHS= (300k-x)/(80.4k+32%*x)=3

300k-x= 241.2k+.96x

58.8k=1.96x

X=30k

Ceded WP 30k PHS=90=80.4+.32*30

Commission ratio =32%

Ceded UEPR= 30k/300k *186k= 18.6

Surplus aid= 32%*18.6=5,952

Ratio 4= 5.952/90=6.613%

Ratio 4 is 6.6%, less than 15%, well within reasonable limits. The regulator <u>will not</u> be worried about surplus aid.
Part c: 0.75 point
Sample 1: Reinsurance Assumed & Ceded need disclosed ceded premium reserve & contingent commission. Sample 2: "Reinsurance Assumed & Ceded" have to give figures on the unearned premium & ceded commission refunded if the reinsurance contract was cancelled. Sample 3: Reinsurance Recoverable for Unsecured Reinsurer. Since no info show this reinsurer has provided any security, if total reinsurance recoverable from this reinsurer is >3% of surplus, additional disclosure required. Sample 4: If disputed reinsurance recoverable was >5% of surplus from one entity and >10% of surplus from all entities, they should have disclosed amount in dispute.
EXAMINER'S REPORT
Part a
The most common errors were to include the prior year's change in unrealized capital gains (7,900), to not include the prior year's unpaid underwriting expenses (600), or to include the prior year's realized capital gains (1,830).
Part b
Most candidates did well on the part of the question dealing with the IRIS 2 ratio, with the most common error coming from using the surplus they calculated in part a instead of 80,400. More candidates had difficulty with the IRIS 4 ratio, especially with knowing the formula for surplus aid and including the correct PHS. Common errors with the surplus aid included using the WP (300,000) instead of the UEP (186,000) and not applying both the 10% ceding ratio and the 32% ceding commission. Candidates also did not update the PHS to include the 9600 in surplus growth. Most knew the 15% threshold to pass the IRIS 4 test and most had appropriate responses/actions by the regulator.
Part c
Candidates were least successful on this part. Many candidates gave answers related to Schedule F, not the Notes to the Financial Statements. Others described the disclosure but did not identify which Note it came from.