

Retro Practice Problem #1 - Answer Key

Indicated Retro at 18 months:

Basic Premium =	Standard Premium x Basic Factor
Basic Premium =	\$1,500,000 x 35%
Basic Premium =	\$525,000
Converted Losses =	Losses x Loss Conversion Factor
Converted Losses =	\$800,000 x 1.10
Converted Losses =	\$880,000
Tax Multiplier =	1.00 + Tax Factor
Tax Multiplier =	1.00 + 0.06
Tax Multiplier =	1.06
Indicated Retro Premium =	\$525,000 + \$880,000 x 1.06
Indicated Retro Premium =	\$1,489,300

Indicated Retro Premium at 30 months:

Basic Premium =	Standard Premium x Basic Factor
Basic Premium =	\$1,500,000 x 35%
Basic Premium =	\$525,000
Converted Losses =	Losses x Loss Conversion Factor
Converted Losses =	\$1,200,000 x 1.10
Converted Losses =	\$1,320,000
Tax Multiplier =	1.00 + Tax Factor
Tax Multiplier =	1.00 + 0.06
Tax Multiplier =	1.06
Indicated Retro Premium =	\$525,000 + \$1,320,000 x 1.06
Indicated Retro Premium =	\$1,955,700

Retro Adjustment at 30 months:

Indicated Retro Premium at 18 Months =	\$1,489,300
Indicated Retro Premium at 30 Months =	\$1,955,700

Retro Adjustment = Most Recent Indicated Premium - Previous Indicated Premium

Retro Adjustment =	\$1,955,700 - \$1,489,300
Retro Adjustment =	\$466,400 (If >0 Additional Premium. If <0 Return Premium).

Retro Practice Problem #2 - Answer Key

Indicated Retro at 18 months:

Basic Premium =	Standard Premium x Basic Factor
Basic Premium =	\$2,000,000 x 30%
Basic Premium =	\$600,000
Converted Losses =	Losses x Loss Conversion Factor
Converted Losses =	\$1,500,000 x 1.12
Converted Losses =	\$1,680,000
Tax Multiplier =	1.00 + Tax Factor
Tax Multiplier =	1.00 + 0.05
Tax Multiplier =	1.05
Indicated Retro Premium =	\$600,000 + \$1,680,000 x 1.05
Indicated Retro Premium =	\$2,394,000

Indicated Retro Premium at 30 months:

Basic Premium =	Standard Premium x Basic Factor
Basic Premium =	\$2,000,000 x 30%
Basic Premium =	\$600,000
Converted Losses =	Losses x Loss Conversion Factor
Converted Losses =	\$1,800,000 x 1.12
Converted Losses =	\$2,016,000
Tax Multiplier =	1.00 + Tax Factor
Tax Multiplier =	1.00 + 0.05
Tax Multiplier =	1.05
Indicated Retro Premium =	\$600,000 + \$2,016,000 x 1.05
Indicated Retro Premium =	\$2,746,800

Retro Adjustment at 30 months:

Indicated Retro Premium at 18 Months =	\$2,394,000
Indicated Retro Premium at 30 Months =	\$2,746,800

Retro Adjustment = Most Recent Indicated Premium - Previous Indicated Premium

Retro Adjustment =	\$2,746,800 - \$2,394,000
Retro Adjustment =	\$352,800 (If >0 Additional Premium. If <0 Return Premium).

Retro Practice Problem #3 - Answer Key

Indicated Retro at 18 months:

Basic Premium =	Standard Premium x Basic Factor
Basic Premium =	\$2,500,000 x 25%
Basic Premium =	\$625,000
Converted Losses =	Losses x Loss Conversion Factor
Converted Losses =	\$1,800,000 x 1.15
Converted Losses =	\$2,070,000
Tax Multiplier =	1.00 + Tax Factor
Tax Multiplier =	1.00 + 0.04
Tax Multiplier =	1.04
Indicated Retro Premium =	\$625,000 + \$2,070,000 x 1.04
Indicated Retro Premium =	\$2,802,800

Indicated Retro Premium at 30 months:

Basic Premium =	Standard Premium x Basic Factor
Basic Premium =	\$2,500,000 x 25%
Basic Premium =	\$625,000
Converted Losses =	Losses x Loss Conversion Factor
Converted Losses =	\$1,500,000 x 1.15
Converted Losses =	\$1,725,000
Tax Multiplier =	1.00 + Tax Factor
Tax Multiplier =	1.00 + 0.04
Tax Multiplier =	1.04
Indicated Retro Premium =	\$625,000 + \$1,725,000 x 1.04
Indicated Retro Premium =	\$2,444,000

Retro Adjustment at 30 months:

Indicated Retro Premium at 18 Months =	\$2,802,800
Indicated Retro Premium at 30 Months =	\$2,444,000

Retro Adjustment = Most Recent Indicated Premium - Previous Indicated Premium

Retro Adjustment =	\$2,444,000 - \$2,802,800
Retro Adjustment =	(\$358,800) (If >0 Additional Premium. If <0 Return Premium).

Retro Practice Problem #4 - Answer Key

Indicated Retro at 18 months:

Basic Premium =	Standard Premium x Basic Factor
Basic Premium =	\$2,000,000 x 30%
Basic Premium =	\$600,000
Converted Losses =	Losses x Loss Conversion Factor
Converted Losses =	\$1,200,000 x 1.12
Converted Losses =	\$1,344,000
Tax Multiplier =	1.00 + Tax Factor
Tax Multiplier =	1.00 + 0.05
Tax Multiplier =	1.05
Indicated Retro Premium =	\$600,000 + \$1,344,000 x 1.05
Indicated Retro Premium =	\$2,041,200

Indicated Retro Premium at 30 months:

Basic Premium =	Standard Premium x Basic Factor
Basic Premium =	\$2,000,000 x 30%
Basic Premium =	\$600,000
Converted Losses =	Losses x Loss Conversion Factor
Converted Losses =	\$1,600,000 x 1.12
Converted Losses =	\$1,792,000
Tax Multiplier =	1.00 + Tax Factor
Tax Multiplier =	1.00 + 0.05
Tax Multiplier =	1.05
Indicated Retro Premium =	\$600,000 + \$1,792,000 x 1.05
Indicated Retro Premium =	\$2,511,600

Retro Adjustment at 30 months:

Indicated Retro Premium at 18 Months =	\$2,041,200
Indicated Retro Premium at 30 Months =	\$2,511,600

Retro Adjustment = Most Recent Indicated Premium - Previous Indicated Premium

Retro Adjustment =	\$2,511,600 - \$2,041,200
Retro Adjustment =	\$470,400 (If >0 Additional Premium. If <0 Return Premium).

Retro Practice Problem #5 - Answer Key

Indicated Retro at 18 months:

Basic Premium =	Standard Premium x Basic Factor
Basic Premium =	\$1,000,000 x 35%
Basic Premium =	\$350,000
Converted Losses =	Losses x Loss Conversion Factor
Converted Losses =	\$400,000 x 1.10
Converted Losses =	\$440,000
Tax Multiplier =	1.00 + Tax Factor
Tax Multiplier =	1.00 + 0.06
Tax Multiplier =	1.06
Indicated Retro Premium =	\$350,000 + \$440,000 x 1.06
Indicated Retro Premium =	\$837,400

Indicated Retro Premium at 30 months:

Basic Premium =	Standard Premium x Basic Factor
Basic Premium =	\$1,000,000 x 35%
Basic Premium =	\$350,000
Converted Losses =	Losses x Loss Conversion Factor
Converted Losses =	\$600,000 x 1.10
Converted Losses =	\$660,000
Tax Multiplier =	1.00 + Tax Factor
Tax Multiplier =	1.00 + 0.06
Tax Multiplier =	1.06
Indicated Retro Premium =	\$350,000 + \$660,000 x 1.06
Indicated Retro Premium =	\$1,070,600

Retro Adjustment at 30 months:

Indicated Retro Premium at 18 Months =	\$837,400
Indicated Retro Premium at 30 Months =	\$1,070,600

Retro Adjustment = Most Recent Indicated Premium - Previous Indicated Premium

Retro Adjustment =	\$1,070,600 - \$837,400
Retro Adjustment =	\$233,200 (If >0 Additional Premium. If <0 Return Premium).