Ratio Study
Problem and Answer Packet with Audio

2026 Level II Tutorials

Problem #1

Calculate the Median of these Sales Ratios

Sales Ratio	Ranked Sales Ratios
1.083	
0.975	
1.035	
0.998	
0.939	

Median	



Problem #1 Answer

Calculate the Median of these Sales Ratios

Sales Ratio	Ranked Sales Ratios
1.083	0.939
0.975	0.975
1.035	0.998
0.998	1.035
0.939	1.083

Median	.998 or 99.8%



Problem #2

Calculate the Median of these Sales Ratios

Sales Ratio	Ranked Sales Ratios
0.968	
1.035	
0.998	
0.863	
0.939	
1.075	

Median	



Problem #2 Answer

Calculate the Median of these Sales Ratios

Sales Ratio	Ranked Sales Ratios
0.968	0.863
1.035	0.939
0.998	0.968
0.863	0.998
0.939	1.035
1.075	1.075

Median	.983 or 98.3%

Median - .968 + .998 = 1.966 divided by 2 = .983 or 98.3%



Problem # 3

Calculate the Mean

Sale #	True Tax Value	Sale Price	Sales Ratio
1	$ 89,500	$ 93,100	
2	$ 118,300	$ 111,800	
3	$ 103,400	$ 107,500	
4	$ 98,200	$ 91,400	
5	$ 112,600	$ 116,200	
	Total of Sales Ratios		
	Total Number of Ratios		
	Mean		



Problem # 3 Answer

Calculate the Mean

Sale #	True Tax Value	Sale Price	Sales Ratio
1	$ 89,500	$ 93,100	0.961
2	$ 118,300	$ 111,800	1.058
3	$ 103,400	$ 107,500	0.962
4	$ 98,200	$ 91,400	1.074
5	$ 112,600	$ 116,200	0.969
	Total of Sales Ratios		5.024
	Total Number of Ratios		5
	Mean		1.005

Mean = 1.005 or 100.5%



Problem # 4

Calculate the Weighted Mean

Sale #	True Tax Value		Sale Price
1	$ 89,500		$ 93,100
2	$ 118,300		$ 111,800
3	$ 103,400		$ 107,500
4	$ 98,200		$ 91,400
5	$ 112,600		$ 116,200

Weighted Mean



Problem #4 Answer

Calculate the Weighted Mean

Sale #	True Tax Value		Sale Price
1	$ 89,500		$93,100
2	$ 118,300		$ 111,800
3	$ 103,400		$ 107,500
4	$ 98,200		$ 91,400
5	$ 112,600		$ 116,200
	$ 522,000	Divided by	$ 520,000

Weighted Mean	1.004 or 100.4%



Problem #5

Using the information provided please complete this Ratio Study

Sale	TTV	Sales Price	Sales Ratio	Median	Abs Dev
1	35,000	36,000			
2	34,100	33,200			
3	91,000	86,400			
4	119,800	129,800			
5	136,600	120,000			
6	174,500	145,300			
				Total Absolute Deviation	
Total				Avg. Absolute Deviation	

# of Sales	
Mean	
Median	
Wghtd. Mean	
COD	
PRD	

Problem #5 Answer

Using the information provided please complete this Ratio Study

Sale	TTV	Sales Price	Sales Ratio	Median	Abs Dev
1	35,000	36,000	0.972	1.040	0.068
2	34,100	33,200	1.027	1.040	0.013
3	91,000	86,400	1.053	1.040	0.013
4	119,800	129,800	0.923	1.040	0.117
5	136,600	120,000	1.138	1.040	0.098
6	174,500	145,300	1.201	1.040	0.161
				Total Absolute Deviation	0.470
Total	591,000	550,700		Avg. Absolute Deviation	0.0784

# of Sales	6
Mean	1.052
Median	1.040
Wghtd. Mean	1.073
COD	7.535
PRD	0.981

