



[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[Redacted text block]

[Redacted text block]

[Redacted text block]

[Redacted text block]

[Redacted text block]

[Redacted text block]

[Redacted text block]

[Redacted text block]

[Redacted text block]

[Redacted text block]

[Redacted text block]

[Redacted text block]

100

100

100

100

100

The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that every entry, no matter how small, should be recorded to ensure the integrity of the financial data. This includes not only sales and purchases but also expenses and income. The document also highlights the need for regular reconciliation of accounts to identify any discrepancies early on. Furthermore, it stresses the importance of using reliable accounting software to streamline the process and reduce the risk of human error. The second part of the document provides a detailed overview of the accounting cycle, from identifying the accounting entity to preparing financial statements. It explains how each step in the cycle contributes to the overall accuracy and reliability of the financial records. The document also includes a section on the importance of internal controls, which are essential for preventing fraud and ensuring the proper handling of assets. Finally, the document concludes with a summary of the key points discussed and a call to action for the reader to implement these practices in their own organization.

Account Name	Debit	Credit
Accounts Receivable	1000	
Accounts Payable		500
Inventory	200	
Equity		1500
Revenue		3000
Expenses	1500	
Net Income		1500

100
101
102
103
104
105
106
107
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140
141
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156
157
158
159
160
161
162
163
164
165
166
167
168
169
170
171
172
173
174
175
176
177
178
179
180
181
182
183
184
185
186
187
188
189
190
191
192
193
194
195
196
197
198
199
200

201
202
203
204
205
206
207
208
209
210
211
212
213
214
215
216
217
218
219
220
221
222
223
224
225
226
227
228
229
230
231
232
233
234
235
236
237
238
239
240
241
242
243
244
245
246
247
248
249
250
251
252
253
254
255
256
257
258
259
260
261
262
263
264
265
266
267
268
269
270
271
272
273
274
275
276
277
278
279
280
281
282
283
284
285
286
287
288
289
290
291
292
293
294
295
296
297
298
299
300

301
302
303
304
305
306
307
308
309
310
311
312
313
314
315
316
317
318
319
320
321
322
323
324
325
326
327
328
329
330
331
332
333
334
335
336
337
338
339
340
341
342
343
344
345
346
347
348
349
350
351
352
353
354
355
356
357
358
359
360
361
362
363
364
365
366
367
368
369
370
371
372
373
374
375
376
377
378
379
380
381
382
383
384
385
386
387
388
389
390
391
392
393
394
395
396
397
398
399
400

[The main body of the page contains a large, dense grid of text that is extremely blurry and illegible. It appears to be a list or a table of contents with multiple columns and rows of entries.]

PHYSICS 439: QUANTUM MECHANICS II

PROBLEM SET 10

Due: Friday, November 10, 2017

1. (20 points) Consider a particle in a one-dimensional potential well defined by

$$V(x) = \begin{cases} 0 & -a \leq x \leq a \\ \infty & \text{otherwise} \end{cases}$$

The ground state wave function is given by

$$\psi_0(x) = \sqrt{\frac{1}{a}} \cos\left(\frac{\pi x}{2a}\right)$$

Calculate the expectation value of the momentum operator \hat{p} in the ground state.

2. (20 points) A particle of mass m is confined in a one-dimensional harmonic potential $V(x) = \frac{1}{2}m\omega^2 x^2$. The ground state wave function is

$$\psi_0(x) = \left(\frac{m\omega}{\pi\hbar}\right)^{1/4} e^{-\frac{m\omega}{2\hbar}x^2}$$

Calculate the expectation value of the kinetic energy $\langle T \rangle$ in the ground state.

3. (20 points) Consider a particle in a one-dimensional potential well defined by

$$V(x) = \begin{cases} 0 & -a \leq x \leq a \\ \infty & \text{otherwise} \end{cases}$$

The first excited state wave function is given by

$$\psi_1(x) = \sqrt{\frac{1}{a}} \sin\left(\frac{\pi x}{2a}\right)$$

Calculate the expectation value of the momentum operator \hat{p} in the first excited state.

4. (20 points) A particle of mass m is confined in a one-dimensional harmonic potential $V(x) = \frac{1}{2}m\omega^2 x^2$. The ground state wave function is

$$\psi_0(x) = \left(\frac{m\omega}{\pi\hbar}\right)^{1/4} e^{-\frac{m\omega}{2\hbar}x^2}$$

Calculate the expectation value of the position operator \hat{x} in the ground state.







[Illegible text]

[Illegible]	[Illegible]	[Illegible]	[Illegible]	[Illegible]	[Illegible]
[Illegible]	[Illegible]	[Illegible]	[Illegible]	[Illegible]	[Illegible]
[Illegible]	[Illegible]	[Illegible]	[Illegible]	[Illegible]	[Illegible]
[Illegible]	[Illegible]	[Illegible]	[Illegible]	[Illegible]	[Illegible]
[Illegible]	[Illegible]	[Illegible]	[Illegible]	[Illegible]	[Illegible]

[Illegible text]

[Illegible text]

[Illegible]	[Illegible]	[Illegible]	[Illegible]	[Illegible]	[Illegible]
[Illegible]	[Illegible]	[Illegible]	[Illegible]	[Illegible]	[Illegible]
[Illegible]	[Illegible]	[Illegible]	[Illegible]	[Illegible]	[Illegible]
[Illegible]	[Illegible]	[Illegible]	[Illegible]	[Illegible]	[Illegible]
[Illegible]	[Illegible]	[Illegible]	[Illegible]	[Illegible]	[Illegible]

[Illegible text]

[Illegible text]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[Redacted text block]

[Redacted text block]

[Redacted text block]

[Redacted text block]

[Redacted text block]

[Redacted text block]

[Redacted text block]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]





