

	Quiz #3	
	(64 points)	(% of max)
101	19	31.7%
102	4	6.7%
104		0.0%
105		0.0%
106	11	18.3%
109	37	61.7%
110	31	51.7%
111		0.0%
113	27	45.0%
115	34.5	57.5%
116	53	88.3%
117	35	58.3%
118	28	46.7%
119	26	43.3%
120	20	33.3%
121	38	63.3%
123	37	61.7%
124	37.5	62.5%
125	36.5	60.8%
126	54	90.0%
128	34	56.7%
129	27	45.0%
130	19	31.7%
132	35	58.3%
133	49	81.7%
134	32	53.3%
135	44	73.3%
136	25.5	42.5%
137	55	91.7%
138	41	68.3%
139	60	100.0%
140	39	65.0%
Average	34.1	51.5%
Stdev	12.9	26.5%

Grade Codes:

Problem #7

- Y – (8 points) Correct Solution (n=6)
- G – (7.5 points) Correct solution, incorrect significant figures (n=5)
- B – (7 points) Arithmetic error (n=2)
- P – (4 points) Calculated average power instead of instantaneous power (n=3)
- H – (2 points) Calculated work instead of the rate of work done (n=7)
- L – (2 points) Tried to find the spatial derivative of the work instead of the time derivative (n=3)
- K – (1 point) Calculated final speed of the crate instead of the instantaneous power (n=1)
- J – (0 points) Little or no significant progress towards solution (n=2)

Problem #8

- X – (8 points) Correct solution, including explanation of sign (n=4)
- I – (7.5 points) Correct method, including explanation, but incorrect sig. figs. (n=3)
- F – (6 points) Does not provide an explanation for the sign of the work found (n=3)
- A – (5.5 points) Incorrect number of sig. figs., and no explanation of the sign of the work done (n=4)
- W – (4 points) Incorrect sign for the work (n=11)
- C – (3 points) Incorrect calculation of the magnitude of the work, no explanation for the sign (n=1)
- E – (2 points) Incorrectly calculates work, both magnitude and sign (n=2)
- J – (0 points) Little or no progress towards solution (n=1)

Problem #9

- X – (8 points) Correct solution, including explanation of sign (n=3)
- B – (7.5 points) Correct method, including explanation, but incorrect sig. figs. (n=2)
- Q – (7 points) Correct method, but lacks explanation of sign of work (n=6)
- M – (6.5 points) Lacks explanation of sign, incorrect sig. figs. (n=1)
- U – (6 points) Lacks explanation of sign, incorrect units (n=1)
- D – (4 points) Incorrect sign for the work done by friction (n=5)
- Z – (4 points) Indicates correct sign for the work, does not compute work or computes incorrectly (n=1)
- V1 – (2 points) No explanation for sign of work, incorrectly calculates either the distance or the friction force (n=5)
- V2 – (1 point) Incorrectly calculates work, both magnitude and sign (n=4)
- J – (0 points) Little or no progress towards solution (n=1)

Problem #10

- X – (8 points) Correct solution, including explanation of sign of the work (n=3)
- C – (7.5 points) Same as X, but incorrect sig. figs. (n=2)
- K – (6 points) Lacks explanation of sign of the work (n=5)
- N – (4 points) Incorrect sign on the work done (n=8)
- Z – (4 points) Indicates correct sign of work, but does not compute (n=1)
- A – (2 points) Includes work done by gravity twice in the expression for net work (n=1)
- I – (2 points) Incorrectly calculates the net force or net work, but has the sign of the work correct (n=2)
- G – (1 point) Incorrectly calculates the net work or force, and indicates incorrect sign for the work done by the man (n=5)
- J – (0 points) Little or no progress towards a solution (n=2)

Problem #11

- X – (8 points) Correct solution (n=5)
- B – (5 points) Misunderstood directions, wrote the kinetic energy in terms of the period (n=2)
- B1 – (4.5 points) Same as B, but with minor algebra error (n=1)

M – (4 points) Has an incorrect sign for either the gravitational potential energy (should be negative) or the kinetic energy (should be positive) (n=4)

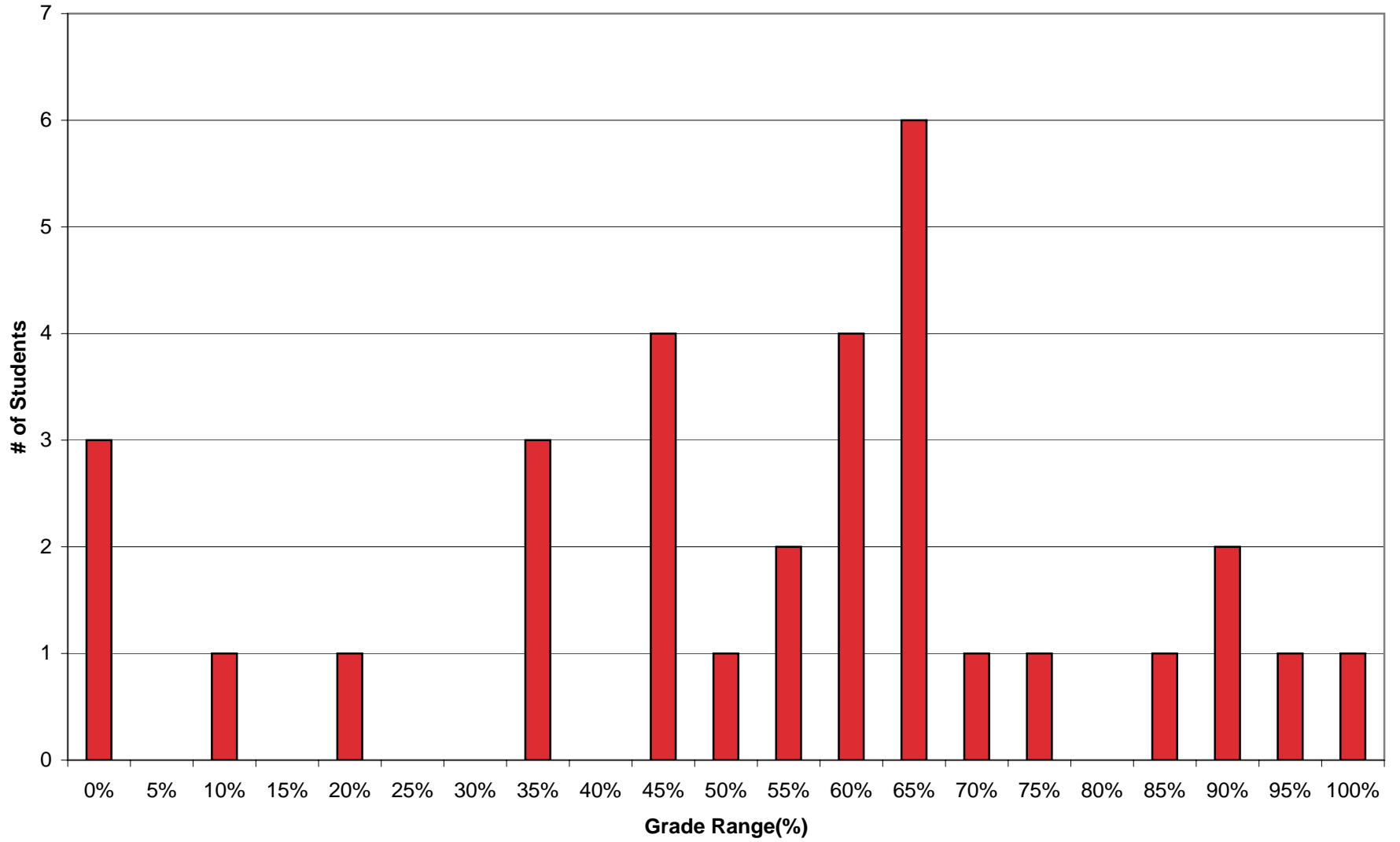
Q – (2 points) Misunderstood directions and wrote the kinetic energy in terms of the period, but had catastrophic algebra errors (n=1)

S – (2 points) Incorrectly set potential energy equal to the centripetal force (n=3)

E – (1 point) Made incorrect assumptions about total energy. Either set it equal to zero, or set it equal to the gravitational potential energy (n=5)

J – (0 points) Little or no progress towards a solution (n=8)

Quiz 3 Grades



Multiple Choice Errors

