

MATH 115 Session #6

Measuring the Stretch of a Bungee Cord

Change (lbs)	Weight (lbs)	Stretch (ft)	Change (ft)	Rate of Change (ft/lbs)	Model	Error
	0	30			30.00	0.00
20	20	35	5	0.25	35.20	0.20
20	40	39	4	0.20	40.40	1.40
20	60	46	7	0.35	45.60	0.40
20	80	53	7	0.35	50.80	2.20
20	100	58	5	0.25	56.00	2.00
20	120	62	4	0.20	61.20	0.80
20	140	66	4	0.20	66.40	0.40
20	160	72	6	0.30	71.60	0.40

Let W = weight (lbs)
and S = stretch (ft)

Slope: 0.26
Intercept: 30.00

Model: $S = 0.26W + 30$

Error Sum: 7.80

