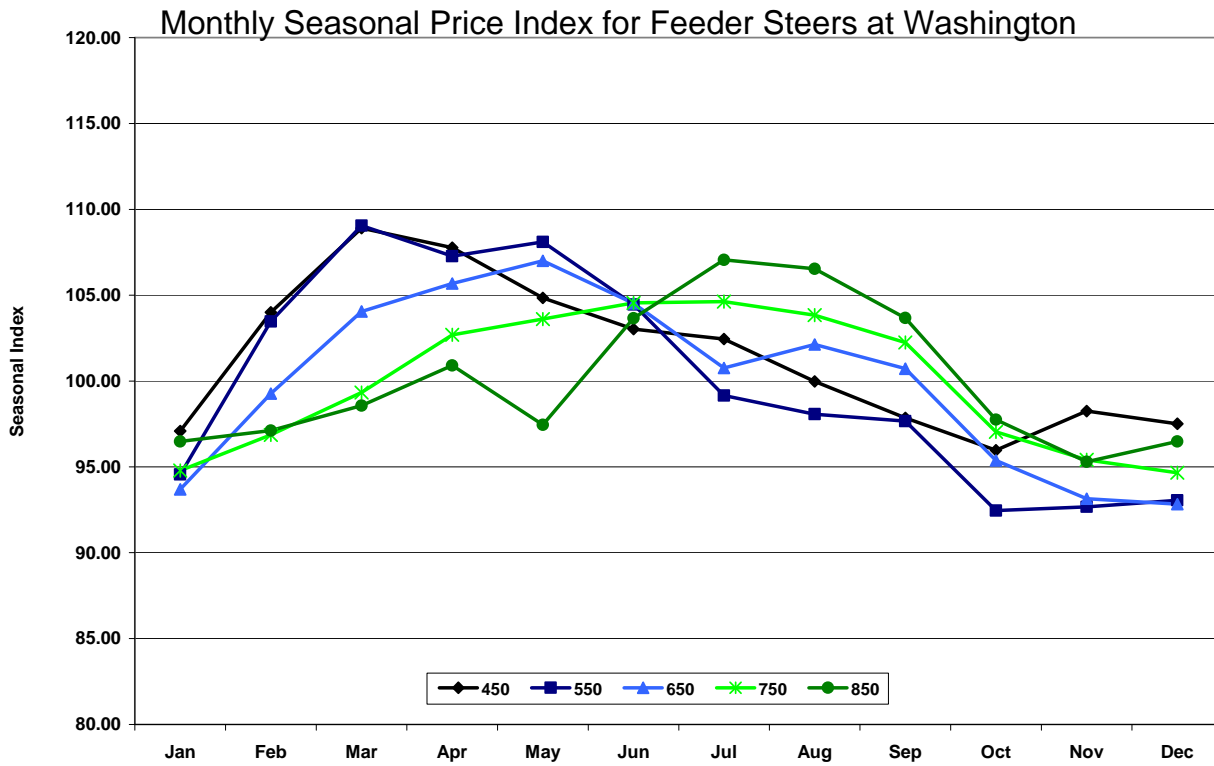


**Predicting Feeder Cattle Prices**  
**Dillon M Feuz**  
**Utah State University**

**Methods to help Predict Feeder Cattle Prices**

Use Monthly Seasonal Index values. Calculate a monthly seasonal index value by dividing the monthly price by the annual average price. If you do this for 5 years and take the average, you have an estimate of the historical seasonal price pattern. Table 1 contains the monthly prices and calculated seasonal index values for Washington from 2006-2010. The average monthly seasonal index values for different weight feeder steers are displayed in the chart below.



These monthly seasonal index values can be used to make short 1-6 month price forecasts to give an estimate of the price in the future. If it were July and I wanted to predict the November price for 550 lbs. steers, then I would take the current July price and divide by the July index and then multiply by the November index. For example, if the price in July was \$145/cwt. then the November prediction would be  $\$145/99.15 \times 92.67 = \$135.52$ . Another example for yearlings, assume the price for 850 lbs. steers was \$120/cwt. in May and that you wanted to predict the September price for 850 lbs. steers. The price prediction would be  $\$120/97.44 \times 103.68 = \$127.68$ . The index values are obtained from Table 1 and the current prices are from the Washington auction market report.

**Table 1. Monthly Seasonal Index Values of Feeder Steers at Washington (2006-2010).**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Average
Price of 450 lb Steers, Washington													
2006	138.64	142.33	140.53	133.37	136.00	125.87	123.91	130.22	127.04	120.33	114.34	108.71	128.44
2007	108.90	119.70	123.58	122.40	121.57	119.01	114.13	114.76	116.96	114.40	112.40	111.23	116.59
2008	104.74	116.36	124.25	122.17	120.90	118.80	116.25	108.39	100.64	94.12	100.91	94.43	110.16
2009	110.24	112.04	113.53	117.96	117.52	109.76	106.50	102.17	102.76	99.19	102.71	105.65	108.34
2010	113.96	121.00	126.68	129.38	123.66	123.71	120.00	118.35	122.56	127.48	133.82	133.39	124.50
Monthly Seasonal Indexes for 450 lb Steers, Washington													
2006	107.94	110.81	109.41	103.84	105.89	98.00		101.39	98.91	93.69	89.02	84.64	
2007	93.41	102.67	106.00	104.99	104.27	102.08	97.89	98.43	100.32	98.12	96.41	95.41	
2008	95.08	105.62	112.79	110.90	109.75	107.84	105.53	98.39	91.36	85.44	91.60	85.72	
2009	97.52	103.72	114.55	115.20	105.00	107.83	110.00	106.66	100.24	100.22	106.74	114.64	
2010	91.53	97.19	101.75	103.92	99.33	99.37	96.39	95.06	98.44	102.39	107.49	107.14	
<b>Average</b>	<b>97.10</b>	<b>104.00</b>	<b>108.90</b>	<b>107.77</b>	<b>104.85</b>	<b>103.02</b>	<b>102.45</b>	<b>99.99</b>	<b>97.85</b>	<b>95.97</b>	<b>98.25</b>	<b>97.51</b>	
Price of 550 lb Steers, Washington													
2006	125.66	130.98	128.48	122.65	120.47	122.17	115.39	117.94	120.76	106.84	100.60	94.56	117.21
2007	99.02	113.00	116.57	114.80	117.74	114.59	108.96	107.83	111.31	105.68	104.64	106.01	110.01
2008	102.39	110.88	125.16	114.86	117.32	117.21	106.94	104.56	97.05	89.35	89.55	88.94	105.35
2009	91.13	102.79	108.61	112.87	115.65	107.63	101.92	97.84	95.78	92.19	96.49	100.60	101.96
2010	104.83	114.03	122.89	126.74	124.68	114.30	113.99	113.67	115.49	117.58	121.01	123.85	117.76
Monthly Seasonal Indexes for 550 lb Steers, Washington													
2006	107.21	111.75	109.62	104.64	102.78	104.23	98.45	100.62	103.03	91.15	85.83	80.68	
2007	90.01	102.72	105.96	104.35	107.02	104.16	99.04	98.02	101.18	96.06	95.12	96.36	
2008	97.19	105.25	118.80	109.03	111.36	111.26	101.51	99.25	92.12	84.81	85.00	84.42	
2009	89.38	100.82	106.52	110.70	113.43	105.56	99.96	95.96	93.94	90.42	94.64	98.67	
2010	89.02	96.84	104.36	107.63	105.88	97.07	96.80	96.53	98.08	99.85	102.76	105.18	
<b>Average</b>	<b>94.56</b>	<b>103.47</b>	<b>109.05</b>	<b>107.27</b>	<b>108.10</b>	<b>104.46</b>	<b>99.15</b>	<b>98.08</b>	<b>97.67</b>	<b>92.46</b>	<b>92.67</b>	<b>93.06</b>	
Price of 650 lb Steers, Washington													
2006	111.91	118.23	115.58	111.26	113.82	115.85	110.70	111.25	112.02	104.16	92.97	91.97	109.14
2007	93.29	98.74	106.53	106.73	113.57	105.73	105.79	106.11	107.52	99.88	98.41	97.48	103.32
2008	93.97	101.80	106.89	107.57	109.05	111.34	103.98	102.02	98.07	86.91	85.27	83.89	99.23
2009	88.96	90.70	97.40	105.38	105.12	98.98	96.49	96.36	93.64	90.13	94.50	91.14	95.73
2010	97.80	105.64	113.09	116.26	112.35	109.49	109.33	113.95	111.34	114.45	111.85	117.50	111.09
Monthly Seasonal Indexes for 650 lb Steers, Washington													
2006	102.53	108.33	105.90	101.94	104.28	106.14	101.43	101.93	102.64	95.43	85.18	84.27	
2007	90.30	95.57	103.11	103.31	109.93	102.34	102.40	102.71	104.07	96.68	95.25	94.35	
2008	94.70	102.59	107.72	108.40	109.90	112.20	102.81	98.83	87.58	85.93	84.54	84.54	
2009	92.92	94.74	101.74	110.08	109.81	103.39	100.79	100.65	97.81	94.15	98.71	95.20	
2010	88.04	95.10	101.80	104.66	101.14	98.56	98.42	102.58	100.23	103.03	100.69	105.77	
<b>Average</b>	<b>93.70</b>	<b>99.27</b>	<b>104.05</b>	<b>105.68</b>	<b>107.01</b>	<b>104.53</b>	<b>100.76</b>	<b>102.14</b>	<b>100.72</b>	<b>95.37</b>	<b>93.15</b>	<b>92.83</b>	
Price of 750 lb Steers, Washington													
2006	104.72	102.73	101.50	100.95	97.63	106.93	108.78	102.55	105.10	99.77	90.84	88.14	100.80
2007	90.89	91.78	95.99	100.13	104.25	99.35	104.97	102.79	105.01	96.10	96.28	96.54	98.67
2008	91.52	95.66	95.49	94.30	99.00	103.37	104.49	102.09	95.91	86.19	83.11	81.52	94.39
2009	88.96	90.70	97.40	105.38	105.12	98.98	96.49	96.36	93.64	90.13	94.50	91.14	95.73
2010	92.24	97.77	100.36	106.67	105.62	107.96	103.84	109.47	105.93	108.27	107.46	111.53	104.76
Monthly Seasonal Indexes for 750 lb Steers, Washington													
2006	103.89	101.91	100.69	100.15	96.85	106.08	107.91	101.73	104.26	98.97	90.12	87.44	
2007	92.11	93.01	97.28	101.48	105.65	100.69	100.69	104.17	106.42	97.39	97.57	97.84	
2008	96.96	101.35	101.17	99.91	104.89	109.52	110.70	108.16	101.61	91.32	88.05	86.37	
2009	92.92	94.74	101.74	110.08	109.81	103.39	100.79	100.65	97.81	94.15	98.71	95.20	
2010	88.05	93.33	95.80	101.82	100.82	103.05	99.12	104.50	101.12	103.35	102.58	106.46	
<b>Average</b>	<b>94.79</b>	<b>96.87</b>	<b>99.34</b>	<b>102.69</b>	<b>103.60</b>	<b>104.55</b>	<b>104.63</b>	<b>103.84</b>	<b>102.25</b>	<b>97.04</b>	<b>95.41</b>	<b>94.66</b>	
Price of 850 lb Steers, Washington													
2006	99.90	99.72	94.32	92.42	89.48	99.49	98.35	100.30	100.32	93.85	88.93	89.25	95.53
2007	89.22	87.58	93.27	95.89	95.14	94.61	101.69	100.93	101.66	95.45	93.12	95.61	95.35
2008	89.25	91.86	92.80	90.12	95.93	99.65	102.19	102.18	94.75	83.03	83.27	81.25	92.19
2009	83.63	83.29	83.82	89.41	76.22	88.00	93.00	90.94	85.76	84.88	82.67	82.10	85.31
2010	89.18	91.85	97.09	104.39	100.10	100.25	101.45	104.13	103.16	100.56	100.60	104.02	99.73
Monthly Seasonal Indexes for 850 lb Steers, Washington													
2006	104.58	104.39	98.74	96.75	93.67	104.15		105.00	105.02	98.24	93.09	93.43	
2007	93.57	91.85	97.82	100.57	99.78	99.23	106.65	105.85	106.62	100.11		100.28	
2008	96.81	99.64	100.66	97.75	104.06	108.09	110.85	110.84	102.78	90.06	90.32	88.13	
2009	98.03	97.63	98.25	104.81	89.34	103.15	109.01	106.60	100.53	99.50	96.91	96.24	
2010	89.42	92.10	97.35	104.67	100.37		101.72	104.41	103.44	100.83	100.87	104.30	
<b>Average</b>	<b>96.48</b>	<b>97.12</b>	<b>98.56</b>	<b>100.91</b>	<b>97.44</b>	<b>103.65</b>	<b>107.06</b>	<b>106.54</b>	<b>103.68</b>	<b>97.75</b>	<b>95.30</b>	<b>96.47</b>	

Futures +/- Basis Price Predictions. Research has shown that for many agricultural commodities, the most accurate forecast for local cash prices is to adjust the futures market price by the historical basis. Basis is defined as your local cash price minus the futures price for the same commodity. Basis for various weights of feeder steers at Washington is displayed in Table 2. Each basis value is an average value over the last five years, 2006-10. The near-by CME Feeder Cattle Futures monthly price was subtracted from each monthly average cash price. For example, if the price in June was \$114.30 for 550 lbs steers and if the Aug Feeder Cattle contract averaged \$110.83 in June, than basis would have been  $\$3.47 = 114.30 - 110.83$ .

As I am writing this paper in mid-September, 2011 the CME Nov 2011 Feeder Cattle Contract is trading around \$139. If I wanted to predict the price of a 550 lbs steer in November 2011, I would add the historical basis of \$0.02 to the \$139 futures price as follows:  $\$139.00 + \$0.02 = \$139.02$ . In July, the September Feeder Cattle contract was trading at \$136. The historical basis for an 850 lbs steer is -\$13.78. Therefore, the predicted September price for 850 lbs steers in Washington would be \$122.22/cwt. ( $\$136.00 - \$13.78$ ). These basis values were obtained from Table 2. More basis information on numerous markets can be obtained at <http://www.beefbasis.com>

Fundamental Rules of Thumb. Feeder cattle prices, fed cattle prices and corn prices are all related. Generally, as the price or expected price of fed cattle increases, the price for feeder cattle will also increase. On the other hand, if the price or expected price for corn increases, feeder cattle prices typically decline. A general rule of thumb is that a \$0.10 per bushel increase in corn prices will result in feeder cattle prices declining \$1.00 per cwt. This is particularly true for cattle weighing 600-800 lbs. Feeder cattle prices may be expected to increase \$1.50 to \$2.00 per cwt. in response to fed cattle prices increasing \$1.00 per cwt.; the lighter the feeder animal, the larger the price increase. These rules of thumb are fairly reliable when prices are adjusting to underlying supply and demand conditions in these markets. However, if commodity prices are responding to changes in the value of the dollar relative to other currencies or to strength or weakness in the economy, you may find that feeder cattle, fed cattle, and corn prices are all moving higher or lower over the same time period.

These methods of predicting prices can give you a general guideline for where prices may be a few months into the future. As you then consider various forward pricing alternatives, this can help you evaluate contract offers and help you decide if you want to forward contract or if you would prefer to wait and sell on the cash market at the time of delivery.

**Table 2. Average Monthly Basis for Feeder Steers at Washington, 2006-2010.**  
**(The average is obtained by ignoring the highest and lowest basis and then averaging the other 3 years)**

CME Feeder Cattle Futures												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2006	112.76	107.93	104.22	101.45	103.21	112.26	114.67	115.96	117.03	108.35	99.06	98.65
2007	96.28	99.36	104.83	108.71	109.17	108.65	114.99	116.32	117.08	112.43	108.98	105.01
2008	99.47	104.95	100.46	101.16	109.19	111.63	112.22	113.84	108.66	97.96	96.04	90.57
2009	94.42	92.64	92.37	98.07	99.49	98.00	103.04	100.32	97.77	93.97	93.64	93.60
2010	97.08	100.08	104.31	112.51	110.67	110.83	113.85	113.53	111.36	109.62	113.85	119.47
Price of 450 lb Steers, Washington												
2006	138.64	142.33	140.53	133.37	136.00	125.87	123.91	130.22	127.04	120.33	114.34	108.71
2007	108.90	119.70	123.58	122.40	121.57	119.01	114.13	114.76	116.96	114.40	112.40	111.23
2008	104.74	116.36	124.25	122.17	120.90	118.80	116.25	108.39	100.64	94.12	100.91	94.43
2009	110.24	112.04	113.53	117.96	117.52	109.76	106.50	102.17	102.76	99.19	102.71	105.65
2010	113.96	121.00	126.68	129.38	123.66	123.71	120.00	118.35	122.56	127.48	133.82	133.39
Basis for 450 lb Steers, Washington												
2006	25.88	34.40	36.31	31.92	32.79	13.61		14.26	10.01	11.98	15.28	10.06
2007	12.62	20.34	18.75	13.69	12.40	10.36	-0.86	-1.56	-0.12	1.97	3.42	6.22
2008	5.27	11.41	23.79	21.01	11.71	7.17	4.03	-5.45	-8.02	-3.84	4.87	3.86
2009	15.82	19.40	21.16	19.89	18.03	11.76	3.46	1.85	4.99	5.22	9.07	12.05
2010	16.88	20.92	22.37	16.87	12.99	12.88	6.15	4.82	11.20	17.86	19.97	13.92
<b>Average</b>	<b>15.10</b>	<b>20.22</b>	<b>22.44</b>	<b>19.26</b>	<b>14.47</b>	<b>11.67</b>	<b>3.74</b>	<b>1.70</b>	<b>4.96</b>	<b>6.39</b>	<b>9.74</b>	<b>9.44</b>
Price of 550 lb Steers, Washington												
2006	125.66	130.98	128.48	122.65	120.47	122.17	115.39	117.94	120.76	106.84	100.60	94.56
2007	99.02	113.00	116.57	114.80	117.74	114.59	108.96	107.83	111.31	105.68	104.64	106.01
2008	102.39	110.88	125.16	114.86	117.32	117.21	106.94	104.56	97.05	89.35	89.55	88.94
2009	91.13	102.79	108.61	112.87	115.65	107.63	101.92	97.84	95.78	92.19	96.49	100.60
2010	104.83	114.03	122.89	126.74	124.68	114.30	113.99	113.67	115.49	117.58	121.01	123.85
Basis for 550 lb Steers, Washington												
2006	12.90	23.05	24.26	21.20	17.26	9.91	0.72	1.98	3.73	-1.51	1.54	-4.09
2007	2.74	13.64	11.74	6.09	8.57	5.94	-6.03	-8.49	-5.77	-6.75	-4.34	1.00
2008	2.92	5.93	24.70	13.70	8.13	5.58	-5.28	-9.28	-11.61	-8.61	-6.49	-1.63
2009	-3.29	10.15	16.24	14.80	16.16	9.63	-1.12	-2.48	-1.99	-1.78	2.85	7.00
2010	7.75	13.95	18.58	14.23	14.01	3.47	0.14	0.14	4.13	7.96	7.16	4.38
<b>Average</b>	<b>4.47</b>	<b>12.58</b>	<b>19.69</b>	<b>14.24</b>	<b>12.91</b>	<b>7.05</b>	<b>-2.09</b>	<b>-3.61</b>	<b>-1.34</b>	<b>-3.34</b>	<b>0.02</b>	<b>1.25</b>
Price of 650 lb Steers, Washington												
2006	111.91	118.23	115.58	111.26	113.82	115.85	110.70	111.25	112.02	104.16	92.97	91.97
2007	93.29	98.74	106.53	106.73	113.57	105.73	105.79	106.11	107.52	99.88	98.41	97.48
2008	93.97	101.80	106.89	107.57	109.05	111.34	103.98	102.02	98.07	86.91	85.27	83.89
2009	88.96	90.70	97.40	105.38	105.12	98.98	96.49	96.36	93.64	90.13	94.50	91.14
2010	97.80	105.64	113.09	116.26	112.35	109.49	109.33	113.95	111.34	114.45	111.85	117.50
Basis for 650 lb Steers, Washington												
2006	-0.85	10.30	11.36	9.81	10.61	3.59	-3.97	-4.71	-5.01	-4.19	-6.09	-6.68
2007	-2.99	-0.62	1.70	-1.98	4.40	-2.92	-9.20	-10.21	-9.56	-12.55	-10.57	-7.53
2008	-5.50	-3.15	6.43	6.41	-0.14	-0.29		-11.82	-10.59	-11.05	-10.77	-6.68
2009	-5.46	-1.94	5.03	7.31	5.63	0.98	-6.55	-3.96	-4.13	-3.84	0.86	-2.46
2010	0.72	5.56	8.78	3.75	1.68	-1.34	-4.52	0.42	-0.02	4.83	-2.00	-1.97
<b>Average</b>	<b>-3.10</b>	<b>1.00</b>	<b>6.75</b>	<b>5.82</b>	<b>3.90</b>	<b>-0.22</b>	<b>-5.54</b>	<b>-6.29</b>	<b>-6.23</b>	<b>-6.36</b>	<b>-6.22</b>	<b>-5.27</b>
Price of 750 lb Steers, Washington												
2006	104.72	102.73	101.50	100.95	97.63	106.93	108.78	102.55	105.10	99.77	90.84	88.14
2007	90.89	91.78	95.99	100.13	104.25	99.35	104.97	102.79	105.01	96.10	96.28	96.54
2008	91.52	95.66	95.49	94.30	99.00	103.37	104.49	102.09	95.91	86.19	83.11	81.52
2009	88.96	90.70	97.40	105.38	105.12	98.98	96.49	96.36	93.64	90.13	94.50	91.14
2010	92.24	97.77	100.36	106.67	105.62	107.96	103.84	109.47	105.93	108.27	107.46	111.53
Basis for 750 lb Steers, Washington												
2006	-8.04	-5.20	-2.72	-0.50	-5.58	-5.33	-5.89	-13.41	-11.93	-8.58	-8.22	-10.51
2007	-5.39	-7.58	-8.84	-8.58	-4.92	-9.30		-13.53	-12.07	-16.33	-12.70	-8.47
2008	-7.95	-9.29	-4.97	-6.86	-10.19	-8.26	-7.73	-11.75	-12.75	-11.77	-12.93	-9.05
2009	-5.46	-1.94	5.03	7.31	5.63	0.98	-6.55	-3.96	-4.13	-3.84	0.86	-2.46
2010	-4.84	-2.31	-3.95	-5.84	-5.05	-2.87	-10.01	-4.06	-5.43	-1.35	-6.39	-7.94
<b>Average</b>	<b>-6.27</b>	<b>-5.03</b>	<b>-3.88</b>	<b>-4.40</b>	<b>-5.18</b>	<b>-5.49</b>	<b>-7.14</b>	<b>-9.74</b>	<b>-9.81</b>	<b>-8.06</b>	<b>-9.11</b>	<b>-8.49</b>
Price of 850 lb Steers, Washington												
2006	99.90	99.72	94.32	92.42	89.48	99.49	98.35	100.30	100.32	93.85	88.93	89.25
2007	89.22	87.58	93.27	95.89	95.14	94.61	101.69	100.93	101.66	95.45	93.12	95.61
2008	89.25	91.86	92.80	90.12	95.93	99.65	102.19	102.18	94.75	83.03	83.27	81.25
2009	83.63	83.29	83.82	89.41	76.22	88.00	93.00	90.94	85.76	84.88	82.67	82.10
2010	89.18	91.85	97.09	104.39	100.10	100.25	101.45	104.13	103.16	100.56	100.60	104.02
Basis for 850 lb Steers, Washington												
2006	-12.86	-8.21	-9.90	-9.03	-13.73	-12.77		-15.66	-16.71	-14.50	-10.13	-9.40
2007	-7.06	-11.78	-11.56	-12.82	-14.03	-14.04	-13.30	-15.39	-15.42	-16.98		-9.40
2008	-10.22	-13.09	-7.66	-11.04	-13.26	-11.98	-10.03	-11.66	-13.91	-14.93	-12.77	-9.32
2009	-10.79	-9.35	-8.55	-8.66	-23.27	-10.00	-10.04	-9.38	-12.01	-9.09	-10.97	-11.50
2010	-7.90	-8.23	-7.22	-8.12	-10.57		-12.40	-9.40	-8.20	-9.06	-13.25	-15.45
<b>Average</b>	<b>-9.64</b>	<b>-9.79</b>	<b>-8.70</b>	<b>-9.58</b>	<b>-13.67</b>	<b>-12.38</b>	<b>-11.22</b>	<b>-12.15</b>	<b>-13.78</b>	<b>-12.84</b>	<b>-11.87</b>	<b>-10.10</b>