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Using Excel to Rank Data Using Standard Scores

WERA Help Document
December 10, 2009

Microsoft Excel - Bottom10-FRL.xls

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Type a question for help

100% Arial 10 B I U

K17

	A	B	C	D	E	F	G	H	I	J	K	L	M
1													
2													
3		MODEL A - (calculated by individual level)											
4		Percent FRL											
6													
7			% FRL	% FRL	% FRL								
8			2008-09	2007-08	2006-07								
9		Arlington	75.19	72.42	72.31								
10		Birney	67.13	69.27	64.44								
11		Blix	85.75	88.74	88.34								
12		Boze	89.49	90.46	89.24								
13		Browns Point	10.70	8.75	10.92								
14		Bryant	60.71	68.66	62.82								
15		Crescent Hts.	18.20	18.35	16.67								
16		DeLong	66.92	68.52	62.09								
17		Downing	41.64	44.15	40.13								
18		Edison	79.75	80.94	74.49								
19		Fawcett	67.67	69.21	62.59								
20		Fern Hill	64.83	68.53	62.57								
21		Franklin	72.55	75.49	68.66								
22		Geiger	64.65	62.63	50.66								
23		Grant	44.72	44.08	43.13								
24		Stafford	70.88	71.81	69.60								
25		Jefferson	62.18	62.47	60.78								
26		Larchmont	66.67	70.24	63.88								
27		Lister	83.82	83.35	84.25								
28		Lowell	21.50	24.75	25.00								

Start by adding elementary schools FRL percent for 3 years (Model "A" calculated by individual levels)

Ready NUM

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M16

	A	B	C	D	E	F	G	H	I	J	K	L	M
1													
2													
3			MODEL A - (calculated by individual level)										
4			Percent FRL										
6													
7			% FRL	% FRL	% FRL	Ave							
8			2008-09	2007-08	2006-07	3 Years							
9		Arlington	75.19	72.42	72.31	73.31							
10		Birney	67.13	69.27	64.44	66.95							
11		Blix	85.75	88.74	88.34	87.61							
12		Boze	89.49	90.46	89.24	89.73							
13		Browns Point	10.70	8.75	10.92	10.12							
14		Bryant	60.71	68.66	62.82	64.07							
15		Crescent Hts.	18.20	18.35	16.67	17.74							
16		DeLong	66.92	68.52	62.09	65.85							
17		Downing	41.64	44.15	40.13	41.97							
18		Edison	79.75	80.94	74.49	78.39							
19		Fawcett	67.67	69.21	62.59	66.49							
20		Fern Hill	64.83	68.53	62.57	65.31							
21		Franklin	72.55	75.49	68.66	72.23							
22		Geiger	64.65	62.63	50.66	59.31							
23		Grant	44.72	44.08	43.13	43.98							
24		Stafford	70.88	71.81	69.60	70.76							
25		Jefferson	62.18	62.47	60.73	61.81							
26		Larchmont	66.67	70.24	63.83	66.93							
27		Lister	83.82	83.35	84.25	83.81							
28		Lowell	21.50	24.75	25.00	23.75							

Draw AutoShapes

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Add formula for average of 3 years

=AVERAGE(C9:E9)

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C46 =SUM(C9:C45)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1														
2														
3		MODEL A - (calculated by individual level)												
4		Percent FRL												
6														
7			% FRL	% FRL	% FRL	Ave								
8			2008-09	2007-08	2006-07	3 Years								
9		Arlington	75.19	72.42	72.31	73.31								
10		Birney	67.13	69.27	64.44	66.95								
11		Blix	85.75	88.74	88.34	87.61								
12		Boze	89.49	90.46	89.24	89.73								
36		Reed	80.79	82.24	77.10	80.05								
37		Roosevelt	92.13	91.38	90.64	91.38								
38		Sheridan	83.63	83.52	78.91	82.02								
39		Sherman	38.82	41.94	38.89	39.88								
40		Skyline	51.80	48.39	41.44	47.21								
41		Stanley	86.44	87.46	86.40	86.77								
42		Wainwright	60.14	58.81	56.99	58.65								
43		Wash.-Hoyt	13.85	15.21	12.37	13.81								
44		Whitman	66.67	72.19	70.28	69.71								
45		Whitier	34.91	36.63	38.30	36.61								
46						2307								
47						62.35								
48						22.22								

Formulas:

- `=SUM(F9:F45)` (points to 2307)
- `=AVERAGE(F9:F45)` (points to 62.35)
- `=STDEVP(F9:F45)` (points to 22.22)

Add formulas

Ready

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L48

	A	B	C	D	E	F	G	H
6								
7			% FRL	% FRL	% FRL	Ave	Standardized	
8			2008-09	2007-08	2006-07	3 Years	Score	
9	Arlington		75.19	72.42	72.31	73.31	54.9	
10	Birney		67.13	69.27	64.44	66.95	52.1	
11	Blix		85.75	88.74	88.34	87.61	61.4	
12	Boze		89.49	90.46	89.24	89.73	62.3	
13	Browns Point		10.70	8.75	10.92	10.12	26.5	
14	Bryant		60.71	68.66	62.82	64.07	50.8	
15	Crescent Hts.		18.20	18.35	16.67	17.74	29.9	
16	DeLong		66.92	68.52	62.09	65.85	51.6	
36	Reed		80.79	82.24	77.10	80.05		
37	Roosevelt		92.13	91.38	90.64	91.38		
38	Sheridan		83.63	83.52	78.91	82.02		
39	Sherman		38.82	41.94	38.89	39.88	39.9	
40	Skyline		51.80	48.39	41.44	47.21	43.2	
41	Stanley		86.44	87.46	86.40	86.77	61.0	
42	Wainwright		60.14	58.81	56.99	58.65	48.3	
43	Wash.-Hoyt		13.85	15.21	12.37	13.81	28.2	
44	Whitman		66.67	72.19	70.28	69.71	53.3	
45	Whitier		34.91	36.63	38.30	36.61	38.4	
46						2307		
47						62.35		
48						22.22		

$$=50+10*(\text{STANDARDIZE}(F9,\$F\$47,\$F\$48))$$

Add column with formula for standard score

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J66

MODEL A - (calculated by individual level)						
Percent FRL						
		% FRL 2008-09	% FRL 2007-08	% FRL 2006-07	Ave 3 Years	Standardized Score
A. Giardrone		67.23	71.51	62.74	67.16	52.2
Baker		66.61	69.64	63.21	66.49	51.9
Gault		84.87	88.83	86.25	86.65	60.9
Gray		73.40	75.57	72.28	73.75	55.1
Hunt		57.91	63.35	59.76	60.34	49.1
Jason Lee		82.10	82.35	83.05	82.50	59.0
Mason		23.58	25.16	22.05	23.60	32.5
McIlvaigh		88.09	88.94	88.94	88.66	61.8
Meeker		21.28	22.28	19.26	20.94	31.6
Stewart		72.66	73.36	68.01	71.34	54.1
Truman		44.39	45.41	40.12	43.31	41.5
MODEL A - (calculated by individual level)						
Percent FRL						
		% FRL 2008-09	% FRL 2007-08	% FRL 2006-07	Ave 3 Years	Standardized Score
Foss		56.21	61.97	55.65	57.94	55.7
Lincoln		70.14	73.64	68.10	70.63	62.0

Repeat for Middle and High Schools

FRL (2) FRL Percent FRL

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Type a question for help

100%

Arial 10 B I U

J66

MODEL B - (calculated by all level)						
Percent FRL						
		% FRL 2008-09	% FRL 2007-08	% FRL 2006-07	Ave 3 Years	Standardized Score
95	Arlington	75.19	72.42	72.31	73.31	55.7
96	Birney	67.13	69.27	64.44	66.95	52.9
97	Blix	85.75	88.74	88.34	87.61	53.1
98	Boze	89.49	90.46	89.24	89.73	63.1
99	Browns Point	10.70	8.75	10.92	10.12	27.9
100	Bryant	60.71	68.66	62.82	64.07	51.7
101	Crescent Hts.	18.20	18.35	16.67	17.74	31.2
102	DeLong	66.92	68.52	62.09	65.85	51.7
103	Downing	41.64	44.15	40.13	41.97	41.7
104	Edison	79.75	80.94	74.49	78.39	51.7
105	Fawcett	67.67	69.21	62.59	66.49	51.7
106	Fern Hill	64.83	68.53	62.57	65.31	51.7
107	Franklin	72.55	75.49	68.66	72.23	51.7
108	Geiger	64.65	62.63	50.66	59.31	41.7
109	Grant	44.72	44.08	43.13	43.98	42.8
110	Stafford	70.88	71.81	69.60	70.76	54.6
111	Jefferson	62.18	62.47	60.78	61.81	50.7
112	Larchmont	66.67	70.24	63.88	66.93	52.9
113	Lister	83.82	83.35	84.25	83.81	60.4
114	Lowell	21.50	24.75	25.00	23.75	33.9

FRL (2) / FRL / Percent FRL

Ready

NUM

Model "B" combines all school levels in the same list

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MODEL A - (calculated by individual level)

Percent FRL

		% FRL 2008-09	% FRL 2007-08	% FRL 2006-07	Ave 3 Years	Standardized Score	Rank Order
9	Arlington	75.19	72.42	72.31	73.31	54.9	12
10	Birney	67.13	69.27	64.44	66.95	52.1	18
11	Blix	85.75	88.74	88.34	87.61	61.4	4
12	Boze	89.49	90.46	89.24	89.73	62.3	3
13	Browns Point	10.70	8.75	10.92	10.12	26.5	37
14	Bryant	60.71	68.66	62.82	64.07	50.8	23
15	Crescent Hts.	18.20	18.35	16.67	17.74	29.9	35
16	DeLong	66.92	68.52	62.09	65.85	51.6	21
17	Downing	41.64	44.15	40.13	41.97	40.8	30
18	Edison	79.75	80.94	74.49	78.39	57.2	11
19	Fawcett	67.67	69.21	62.59	66.49	51.9	20
20	Fern Hill	64.83	68.53	62.57	65.31	51.3	22
21	Franklin	72.55	75.49	68.66	72.23	54.4	14
22	Geiger	64.65	62.63	50.66	59.31	48.6	25
23	Grant	44.72	44.08	43.13	43.98	41.7	29
24	Stafford	70.88	71.81	69.60	70.76	53.8	16
25	Jefferson	62.18	62.47	60.78	61.81	49.8	24
26	Larchmont	66.67	70.24	63.88	66.93	52.1	19
27	Lister	83.82	83.35	84.25	83.81	59.7	7
28	Lowell	21.50	24.75	25.00	23.75	32.6	34

Add column for ranking

=RANK(H9,\$H\$9:\$H\$45,0)

3 Year Trend FRL Standardized Scores Elementary Schools

