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Levels of Multiple intelligence among basic education stage students in Gaza and Its relation with achievement in mathematics and students interests

Abstract: The study aimed at identifying the levels of multiple intelligence among basic education stage students in Gaza and Its relation with achievement in Mathematics and students interests. The sample of the study included (1387) male and female students from the first class to the tenth class in Gaza government schools. To answer the study questions, the researchers used the analytic descriptive approach, and the following tools: "Teele" inventory of multiple intelligences , an achievement test in mathematics, and interests inventory in mathematics. The researchers used the following statistical techniques: frequencies, means, and Spearman's rank coefficient. The results showed that the sample of the study has "multiple intelligences" with varying degrees to basic education stage students. There is a correspondence between musical intelligence, and intra personal intelligence and inter personal intelligence in both males and

females. Inter personal intelligence exceeded intra personal intelligence for both of them.

The order of verbal Linguistic intelligence, logical - mathematical intelligence, spatial intelligence, and bodily - kinesthetic intelligence vary in males and females. logical - mathematical intelligence and bodily - kinesthetic intelligence in males exceeded rather than females, verbal Linguistic intelligence and spatial intelligence in females exceeded rather than males.

Results showed that there was a positive relationship between logical - mathematical intelligence and achievement in mathematics as well as there was positive relationship between logical - mathematical intelligence and interest in mathematics among the 10th graders in Gaza.

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Howard Gardner "

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Intelligence

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Multiple Intelligence

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: Verbal Linguistic Intelligence

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: Logical Mathematical Intelligence

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: Visual Spatial Intelligence

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: Musical Rhythmic Intelligence -

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: Bodily Kinesthetic Intelligence -

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Interpersonal Intelligence -

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Intrapersonal Intelligence -
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: Naturalist Intelligence :[: -] [-

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Existential Intelligence
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Gardner " "

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" .[-]	"Melrose" " " ()	
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() .[-]	"Madsen" " " ()	

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“Ksicinski ” ” ” .

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	“Carson” “ ” ()	

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1	18.78	1.93	5.26	5270	1002	-
5	14.10	1.56	3.95	3955	1002	-
6	10.79	1.70	3.02	3026	1002	-
4	14.29	1.58	4.00	4010	1002	-

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7	7.08	1.60	1.98	1985	1002	-
3	16.88	1.55	4.73	4737	1002	-
				28056	1002	

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2	17.61	1.81	4.93	2436	494	-
1	19.07	1.87	5.34	2638	494	-
5	13.95	1.59	3.90	1929	494	-
6	9.09	1.63	2.55	1258	494	-
4	15.80	1.48	4.43	2186	494	-
7	7.57	1.60	2.12	1047	494	-
3	16.90	1.63	4.73	2338	494	-
				13832	494	

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1	18.54	1.61	5.19	2637	508	-
2	18.50	1.99	5.18	2632	508	-
4	14.24	1.54	3.99	2026	508	-
6	12.43	1.65	3.48	1768	508	-
5	12.82	1.56	3.59	1824	508	-
7	6.59	1.58	1.85	938	508	-
3	16.87	1.47	4.72	2399	508	-
				14224	508	

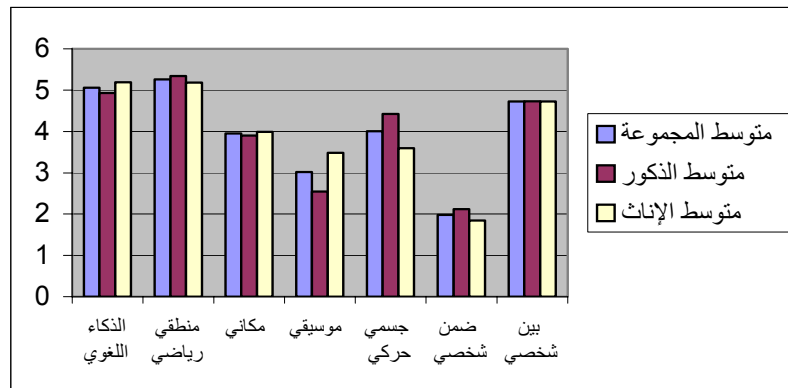
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2	16.45	2.04	4.61	1239	269	-
1	17.18	1.88	4.81	1294	269	-
3	15.77	1.55	4.42	1188	269	-
6	12.53	1.48	3.51	944	269	-
5	14.06	1.58	3.94	1059	269	-
7	9.47	1.75	2.65	713	269	-
4	14.54	1.58	4.07	1095	269	-
				7532	269	

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3	15.72	2.11	4.40	590	134	-
1	17.16	1.78	4.81	644	134	-
2	16.58	1.44	4.64	622	134	-
6	10.87	1.38	3.04	408	134	-
4	15.09	1.55	4.22	566	134	-
7	10.85	1.68	3.04	407	134	-
5	13.73	1.71	3.84	515	134	-
				3752	134	

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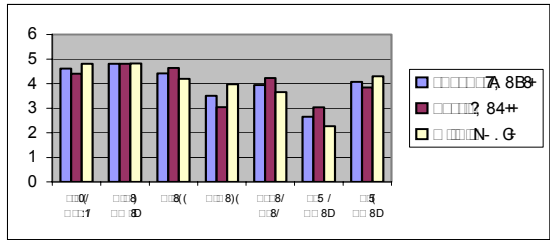
2	17.17	1.96	4.81	649	135	-
1	17.20	1.98	4.81	650	135	-
4	14.97	1.63	4.19	566	135	-
5	14.18	1.44	3.97	536	135	-
6	13.04	1.56	3.65	493	135	-
7	8.10	1.74	2.27	306	135	-
3	15.34	1.41	4.30	580	135	-
				3780	135	

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2	19.56	1.59	5.48	1501	274	-
1	20.15	1.89	5.64	1546	274	-
5	13.59	1.41	3.81	1043	274	-
6	10.39	1.68	2.91	797	274	-
4	14.16	1.66	3.96	1086	274	-
7	5.85	1.36	1.64	449	274	-
3	16.29	1.33	4.56	1250	274	-
				7672	274	

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2	18.67	1.78	5.23	690	132	-
1	20.16	1.85	5.64	745	132	-
5	13.15	1.40	3.68	486	132	-
6	8.87	1.72	2.48	328	132	-
4	16.53	1.51	4.63	611	132	-
7	5.68	1.32	1.59	210	132	-
3	16.94	1.35	4.74	626	132	-
				3696	132	

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1	20.40	1.34	5.71	811	142	-
2	20.15	1.92	5.64	801	142	-
4	14.01	1.42	3.92	557	142	-
6	11.80	1.54	3.30	469	142	-
5	11.95	1.56	3.35	475	142	-
7	6.01	1.40	1.68	239	142	-

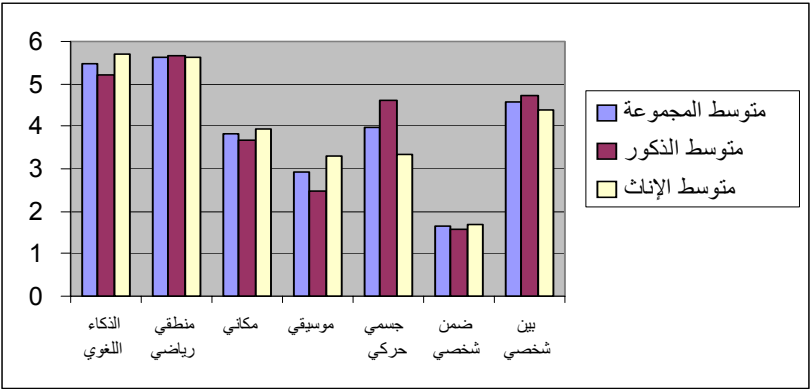
3	15.69	1.29	4.39	624	142	-
				3976	142	

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2	18.87	1.51	5.28	1305	247	-
1	19.27	1.95	5.40	1333	247	-
5	13.81	1.55	3.87	955	247	-
6	9.21	1.65	2.58	637	247	-
4	14.47	1.50	4.05	1001	247	-
7	6.00	1.46	1.68	415	247	-
3	18.36	1.50	5.14	1270	247	-
				6916	247	

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2	19.13	1.53	5.36	659	123	-
1	19.22	1.82	5.38	662	123	-
5	13.68	1.62	3.83	471	123	-
6	7.67	1.42	2.15	264	123	-
4	15.97	1.44	4.47	550	123	-
7	6.21	1.44	1.74	214	123	-

3	18.12	1.42	5.07	624	123	-
				3444	123	

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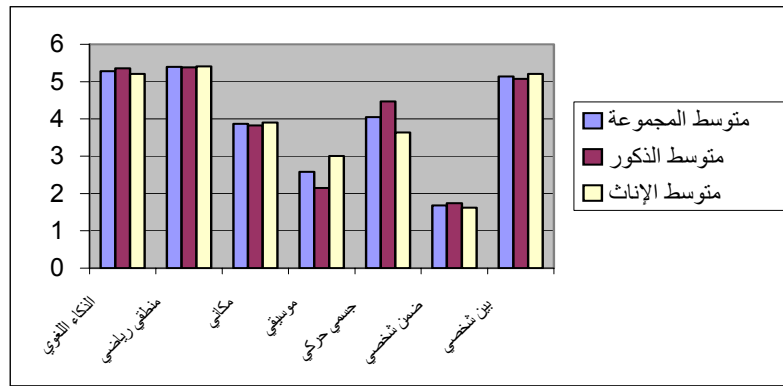
2	18.61	1.49	5.21	646	124	-
1	19.33	2.08	5.41	671	124	-
4	13.94	1.48	3.90	484	124	-
6	10.74	1.76	3.01	373	124	-
5	12.99	1.46	3.64	451	124	-
7	5.79	1.49	1.62	201	124	-
2	18.61	1.58	5.21	646	124	-
				3472	124	

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3	17.32	1.48	4.85	1028	212	-
2	18.48	1.92	5.17	1097	212	-
5	12.95	1.66	3.63	769	212	-
6	10.92	1.90	3.06	648	212	-
4	14.56	1.55	4.08	864	212	-
7	6.87	1.58	1.92	408	212	-
1	18.90	1.49	5.29	1122	212	-
				5936	212	

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3	16.90	1.55	4.73	497	105	-
1	19.97	1.95	5.59	587	105	-
5	11.90	1.62	3.33	350	105	-
6	8.78	1.90	2.46	258	105	-
4	15.61	1.40	4.37	459	105	-
7	7.35	1.53	2.06	216	105	-
2	19.49	1.59	5.46	573	105	-
				2940	105	

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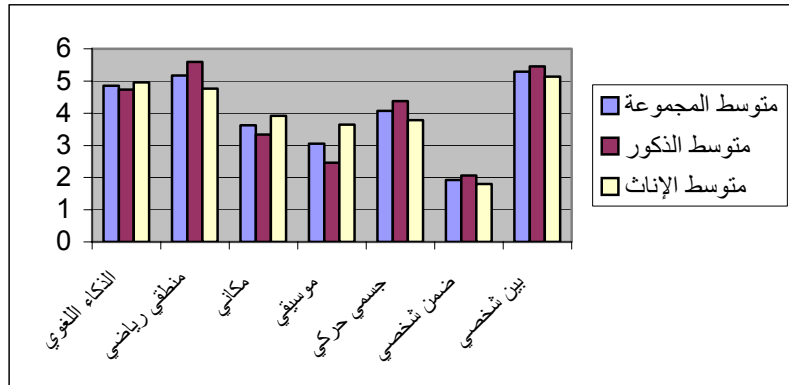
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2	17.72	1.41	4.96	531	107	-
3	17.02	1.81	4.77	510	107	-
4	13.99	1.66	3.92	419	107	-
5	13.02	1.72	3.64	390	107	-
6	13.52	1.64	3.79	405	107	-
7	6.41	1.62	1.79	192	107	-
1	18.32	1.36	5.13	549	107	-
				2996	107	

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2	16.252	1.494	4.551	1752	385	-
3	15.547	2.405	4.353	1676	385	-
5	13.516	1.707	3.784	1457	385	-
6	11.280	2.129	3.158	1216	385	-
4	14.174	1.605	3.969	1528	385	-
7	7.857	1.729	2.200	847	385	-
1	21.373	1.568	5.984	2304	385	-
					385	

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3	16.757	1.542	4.692	868	185	-
2	17.046	2.353	4.773	883	185	-
5	12.915	1.588	3.616	669	185	-
6	9.768	2.062	2.735	506	185	-
4	15.425	1.592	4.319	799	185	-
7	6.544	1.553	1.832	339	185	-
1	21.544	1.500	6.032	1116	185	-
				5180	185	

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2	15.786	1.440	4.420	884	200	-
3	14.161	2.394	3.965	793	200	-
4	14.071	1.801	3.940	788	200	-
6	12.679	2.121	3.550	710	200	-
5	13.018	1.553	3.645	729	200	-
7	9.071	1.815	2.540	508	200	-
1	21.214	1.631	5.940	1188	200	-
				5600	200	

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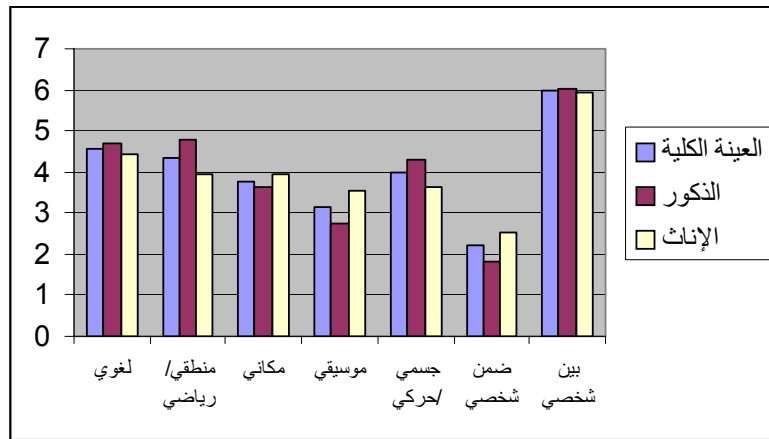
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www.iugaza.edu : -

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$$\frac{1}{2} \left(\frac{1}{2} \right) = \frac{1}{4} \quad (1)$$
$$\frac{d}{dt} \left(\frac{1}{\rho} \right) = - \frac{1}{\rho^2} \frac{d\rho}{dt} \quad ()$$
$$\frac{1}{2} \left(\frac{1}{2} \right) = \frac{1}{4} \quad (1)$$
$$\frac{1}{2} \left(\frac{1}{2} \right) = \frac{1}{4}$$

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ملحق (1)

قائمة " تيلي " للذكاوات المتعددة



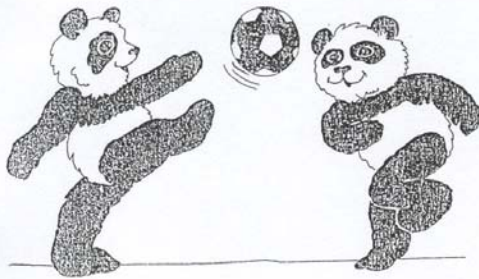
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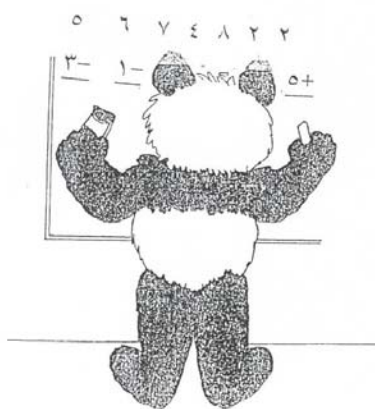
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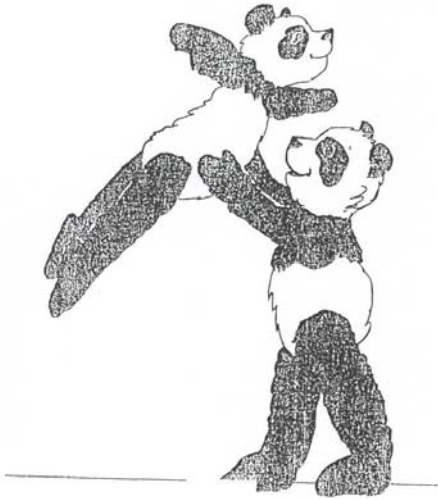


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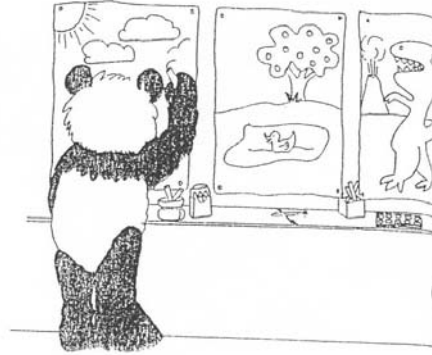


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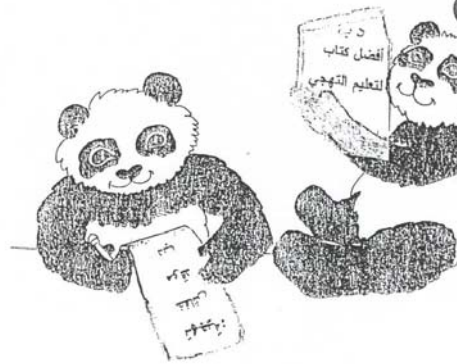
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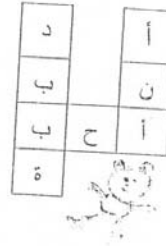


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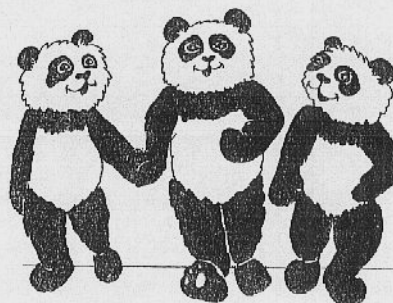
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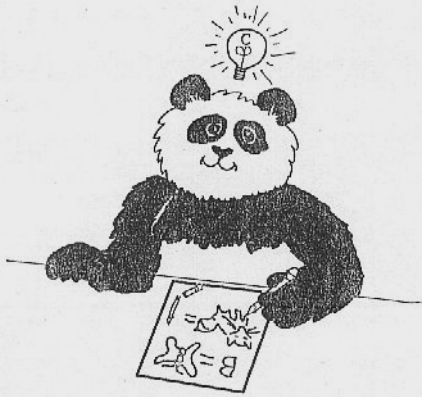


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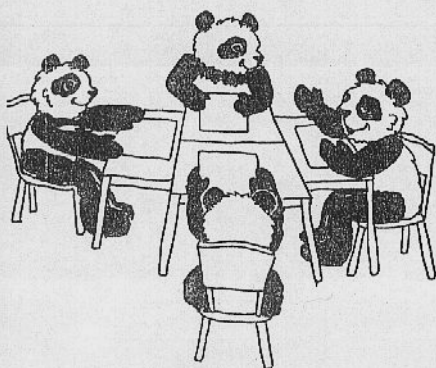
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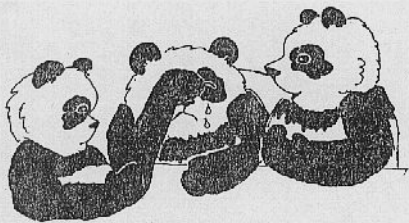
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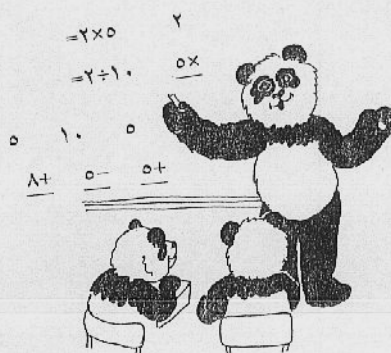
۲۲ ب



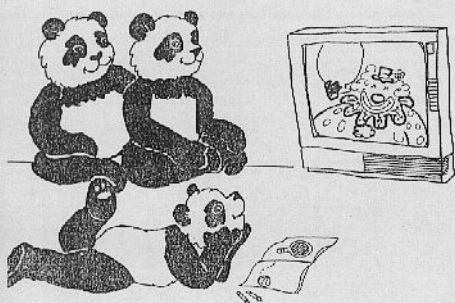
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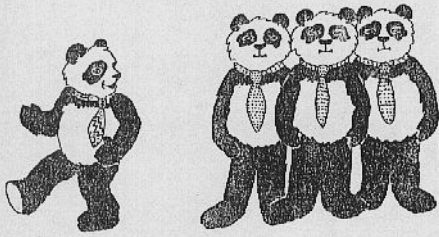
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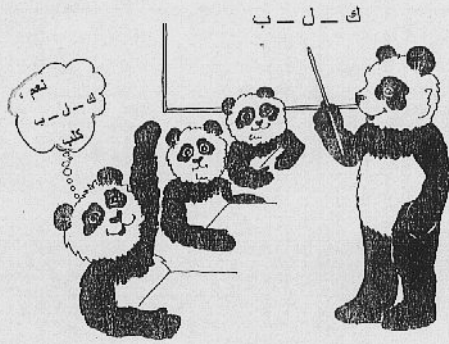
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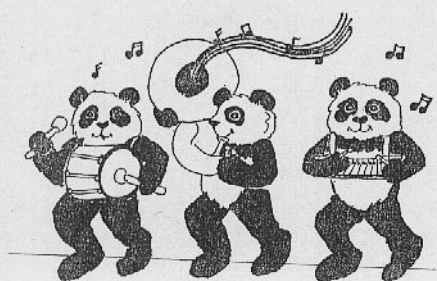
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تابع ملحق (١)

قائمة "تيلي" للذكاوات المتعددة

الاسم:

الاسم:

الفصل:

التاريخ:

العمر:

أنثى ()

ذكر () النوع:

ورقة الإجابة

الرقم	أ	ب
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☐	☐	☐	☐	☐	☐	☐	☐	الإجمالي
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1. لغوي 2. منطقي/رياضي 3. مكاني 4. موسيقى 5. جسمي/حركي 6. ضمن شخصي 7. بين شخصي

الذكاوات المسيطرة

1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____ 7 _____

