Excel It! ACTIVITY

11 Quiz Scores 2

New Skills

1. Use the Average, Maximum, and Minimum functions.
2. Sort data in descending order (Z-A)

Activity Overview

This activity expands on the QUIZ SCORES spreadsheet created in Activity 10. In this activity, you will compute the average, maximum (highest), and minimum (lowest) Quiz 1, Quiz 2, and Quiz 3 scores and then sort the total scores in descending order (highest to lowest).

Instructions

1. Open the file QUIZ SCORES previously created in Activity 10.

★ *Unless otherwise stated, the font should be 10 point Arial.*

2. Change the Activity # in row 1 to read Activity 11.

NEW SKILL ▶ 3. Compute the AVERAGE, MAXIMUM, and MINIMUM formulas for column C, QUIZ 1, as follows:

   a. In cell C47, type =AVERAGE(C10:C43)

   b. In cell C48, type =MAX(C10:C43)

   c. In cell C49, type =MIN(C10:C43)

   d. Select cells C47 – C49 and use the AutoFill feature to copy the formulas to the remaining QUIZ 2, QUIZ 3, and TOTAL columns.

4. Format cells C47 – C49 as numbers displaying 0 decimal places.

NEW SKILL ▶ 5. Sort the spreadsheet by TOTAL Quiz Scores (column F) from the highest score to lowest score. To do this, select cells A10 – F43 and sort in descending order (Z-A). Use the column "TOTAL" to Sort by. (**Note:** The student with the highest TOTAL score will appear at the top, and the student with the lowest TOTAL score will appear at the bottom.)

6. Display formulas in your spreadsheet by using <CTRL> + ` to check for accuracy.
7. Carefully proofread your work for accuracy.
8. Save the spreadsheet as QUIZ SCORES 2.
9. Analyze the changes made to the data in the spreadsheet.
10. Set the Print Area to include all cells containing data in the spreadsheet.
11. Print Preview and adjust the Page Setup so that the spreadsheet fits on one page.
12. Print a copy of the spreadsheet if required by your instructor.

Quiz Scores 2

INPUT **DATA**

	A	B	C	D	E	F
1	Activity 10 Student Name					
2	**George K. Brent High School**					
3	3993 Kingston Boulevard					
4	Trenton, NJ 08601					
5						
6	**Grade Sheet: Social Studies - Period 5**					
7	Teacher: Ms. Yasmine Sanchez					
8						
9	**LAST**	**FIRST**	**QUIZ 1**	**QUIZ 2**	**QUIZ 3**	**TOTAL**
10	Blain	Edward	60	68	75	203
11	Bowers	Francis	74	79	82	235
12	Branchini	Alvaro	91	100	98	289
13	Brazil	Richard	84	92	89	265
14	Bucklin	Fred	60	72	68	200
15	Bueno	Pedro	100	98	94	292
16	Cody	Vanessa	87	91	89	267
17	Cohen	Paula	95	99	90	284
18	Correia	Jose	80	88	84	252
19	Derrick	Jason	69	75	81	225
20	Devlin	Donna	81	80	84	245
21	Fernandez	Joao	78	71	80	229
22	Francois	Marie	92	100	99	291
23	Furness	Louise	62	72	69	203
24	Giampa	Frank	96	84	88	268
25	Glasser	Stephen	96	89	91	276
26	Glidden	Walter	70	75	80	225
27	Ixcuna	Juanita	71	82	88	241
28	Knecht	Benjamin	88	96	82	266
29	Lombardi	Angelo	80	78	72	230
30	Longo	James	88	86	90	264
31	Lu	Lucy	100	95	88	283
32	Lucas	Andre	72	80	91	243
33	Meeks	Sharyn	80	84	78	242
34	Melville	Jennifer	77	81	89	247
35	Monterroso	Carlos	60	71	82	213
36	Morel	Roger	92	90	99	281
37	Pan	Chantou	92	99	100	291
38	Waterhouse	Brittany	99	90	85	274
39	Weinstein	Deborah	71	80	83	234
40	Welker	Christopher	76	72	68	216
41	White	Betsy	94	90	88	272
42	Zorral	Pablo	99	90	96	285
43	Zuber	John	98	88	90	276
44						
45						
46						
47	AVERAGE					
48	MAXIMUM					
49	MINIMUM					
50						
51	Note: Each quiz is based on 100 points. Total possible points = 300.					

12 Teen U.S.A. Payroll Register

New Skills

1. Use formulas to multiply, add, and subtract numbers.
2. Use parentheses in formulas.
3. Use a formula that references the answer to another cell's formula.
4. Change page margins.

Activity Overview

Teen U.S.A. is an alcohol-free teen night club and a place for teens under 18 to socialize and have fun. The club provides a high-energy environment where teens can dance to the hottest Top 40 hits and participate in special event nights. Teen U.S.A. has clubs in most major metropolitan cities and presents an exciting alternative to seeing movies or walking around the mall. The club offers a great variety of food, sodas, shakes, and tasty fruit drinks.

The following activity illustrates how Teen U.S.A. uses spreadsheets to compute payroll amounts for its employees (known as a payroll register).

Instructions

1. Create a NEW spreadsheet.

* *Unless otherwise stated, the font should be 10 point Arial.*

2. Type the data as shown.
3. Bold Cells A2 – L11.
4. Underline row 11.
5. Format the width of columns A, B, and C to 12.0 and left align.
6. Format the width of columns D and E to 10.0 and center align.
7. Format the width of columns F – L to 10.0 and right align.
8. Format cells E13 – L32 as numbers displaying 2 decimal places.

NEW SKILL ▶

9. Compute GROSS PAY, all deductions, and NET PAY for the first employee as follows:
   a. GROSS PAY=HOURS WORKED*HOURLY RATE --> In cell F13, type **=D13*E13**
   b. FEDERAL TAX=GROSS PAY*15% --> In cell G13, type **=F13*15%**
   c. SOCIAL SEC. TAX=GROSS PAY*6.2% --> In cell H13, type **=F13*6.2%**
   d. MEDICARE TAX=GROSS PAY*1.45% --> In cell I13, type **=F13*1.45%**
   e. STATE TAX=GROSS PAY*4% --> In cell J13, type **=F13*4%**
   f. PENSION=GROSS PAY*3% --> In cell K13, type **=F13*3%**
   g. NET PAY=GROSS PAY-(the sum of all deductions) --> In cell L13, type **=F13-(G13+H13+I13+J13+K13)**
10. Use the AutoFill feature to copy the formulas to the remaining cells for each of the employees.

12 Teen U.S.A. Payroll Register

INPUT **DATA**

	A	B	C	D	E	F	G	H	I	J	K	L
1	Activity 12 Student Name											
2	TEEN U.S.A.											
3	1 Boardwalk											
4	Atlantic City, NJ 08400											
5												
6												
7	HOURLY WORKERS' PAYROLL REGISTER											
8	Pay date: Friday, February 25, 2011											
9												
10	EMPLOYEE	LAST	FIRST	HOURS	HOURLY	GROSS	FEDERAL	SOCIAL	MEDICARE	STATE		NET
11	NUMBER	NAME	NAME	WORKED	RATE	PAY	TAX	SEC. TAX	TAX	TAX	PENSION	PAY
12												
13	457894	Andrews	Sandra	32	13.50							
14	488522	Bruzzi	Madison	25	11.50							
15	687444	Buckley	David	36	12.00							
16	647895	Bukowski	Ted	39	11.25							
17	336654	Cage	Latoiya	32	11.25							
18	219632	Corey	Isabella	40	12.50							
19	211235	Falkoner	Ethan	27	10.00							
20	414789	Fannin	Chloe	35	10.25							
21	548993	Hadley	Jimarcus	30	12.00							
22	112554	McLaughlin	Emma	37	12.50							
23	114589	Narciso	Elizabeth	36	12.00							
24	556698	Nathan	Robert	34	11.50							
25	254687	Ngeth	Champei	31	11.50							
26	226985	Paparo	Jacob	33	11.25							
27	697777	Peterson	Trista	27	12.50							
28	468231	Reese	Robert	30	12.00							
29	357915	Schofield	Steven	33	10.00							
30	548855	Sheehan	Shannon	25	10.75							
31	145874	Shurtleff	Noah	23	10.50							
32	487895	Toscano	Timothy	28	12.00							

MLB® Standings

New Skills

1. Print gridlines in a spreadsheet.
2. Copy and paste formulas.

Activity Overview

The great All-American pastime is certainly baseball. Most Major League Baseball (MLB®) games are nationally televised so that fans can enjoy watching their favorite teams play. Baseball fans seeking information about the standings of the various teams can obtain that information from the Internet and most daily newspapers.

The following activity illustrates how Web sites and newspapers use spreadsheets to list the MLB® standings.

Instructions

1. Create a NEW spreadsheet.

* *Unless otherwise stated, the font should be set to 10 point Arial.*

2. Type the data as shown.
3. Set the top margin to .5 inches and the bottom margin to .25 inches.
4. Bold cell A2 and change the font size to 20 point.
5. Bold cells C4 and C28 and change the font size to 14 point.
6. Bold cells A5, A13, A21, A29, A37, and A46 and change the font size to 12 point.
7. Bold rows 6, 14, 22, 30, 38, and 47.
8. Format the width of column A to 15.0 and columns B – G to 8.0.
9. Center align cells B6 – G52.
10. Enter the formula to calculate the PCT (Winning Percentage) for the first team, the NY Yankees®, as follows: PCT=W/(W+L) (**Note:** W=Wins, L=Losses) -> In cell D7, type **=B7/(B7+C7)**

NEW SKILL ▶ 11. To complete the PCT column for each team, copy and paste the formula in cell D7 to cells D8 – D11, D15 – D19, D23 – D26, D31 – D35, D39 – D44, and D48 – D52.

12. Select column D and format it as numbers displaying 3 decimal places.
13. Enter the formula to calculate the DIFF (Run Differential) for the first team, the NY Yankees®, as follows: DIFF=RS-RA (**Note:** RS=Runs Scored, RA=Runs Allowed) -> In cell G7, type **=E7-F7**

NEW SKILL ▶ 14. To complete the DIFF column for each team, copy and paste the formula in cell G7 to cells G8 – G11, G15 – G19, G23 – G26, G31 – G35, G39 – G44, and G48 – G52.

MLB® Standings

INPUT **DATA**

	A	B	C	D	E	F	G
1	Activity 13 Student Name						
2	MLB STANDINGS: 9/22/10						
3							
4			AMERICAN LEAGUE				
5	EAST						
6		W	L	PCT	RS	RA	DIFF
7	NY Yankees	92	60		810	627	
8	Tampa Bay	90	61		762	618	
9	Boston	84	68		764	694	
10	Toronto	76	75		697	692	
11	Baltimore	61	91		581	752	
12							
13	CENTRAL						
14		W	L	PCT	RS	RA	DIFF
15	Minnesota	92	60		745	598	
16	Chicago Sox	80	72		706	670	
17	Detroit	77	75		707	701	
18	Kansas City	62	89		631	802	
19	Cleveland	62	90		597	720	
20							
21	WEST						
22		W	L	PCT	RS	RA	DIFF
23	Texas	84	67		730	637	
24	Oakland	76	75		609	577	
25	LA Angels	75	77		648	667	
26	Seattle	58	93		481	643	
27							
28			NATIONAL LEAGUE				
29	EAST						
30		W	L	PCT	RS	RA	DIFF
31	Philadelphia	92	61		723	610	
32	Atlanta	86	67		705	588	
33	Florida	76	75		686	670	
34	NY Mets	74	78		618	616	
35	Washington	64	88		628	704	
36							
37	CENTRAL						
38		W	L	PCT	RS	RA	DIFF
39	Cincinnati	86	67		747	660	
40	St. Louis	77	74		681	610	
41	Houston	73	79		580	678	
42	Milwaukee	70	81		696	767	
43	Chicago Cubs	69	82		653	724	
44	Pittsburgh	53	98		535	809	
45							
46	WEST						
47		W	L	PCT	RS	RA	DIFF
48	San Diego	85	66		639	544	
49	San Francisco	85	67		649	556	
50	Colorado	82	69		732	657	
51	LA Dodgers	73	79		625	656	
52	Arizona	61	91		678	796	

Source: http://www.espn.go.com/mlb/standings

Excel It!
ACTIVITY

14 San Francisco Giants®

New Skills

1. Divide numbers in a formula.
2. Use the SUM function.

Instructions

1. Create a NEW spreadsheet.

★ *Unless otherwise stated, the font should be 10 point Arial.*

2. Type the data as shown.
3. Format the width of column A to 18.0 and left align.
4. Format the width of columns B – K to 10.0 and center align.
5. Bold cell A2 and change the font size to 14 point.
6. Bold rows 4, 23, 26, and 41.
7. Underline rows 4 and 26.

NEW SKILL ▶ 8. Enter the formula for the AVG (Batting Average) for the first player as follows: AVG=HITS/AB (**Note:** AB=At Bats) –> In cell F6, type **=E6/D6**

9. Use the AutoFill feature to copy the Batting Averages (AVG) formula down in column F for the remaining players.
10. Format cells F6 – F23 as numbers displaying 3 decimal places.
11. Enter the formula for the ERA. (Earned Run Average) for the first pitcher as follows: ERA=Runs/Innings*9 –> In cell G28, type **=F28/E28*9**
12. Use the AutoFill feature to copy the Earned Run Averages (ERA) formula down in column G for the remaining pitchers.
13. Format cells G28 – G41 as numbers displaying 2 decimal places.

NEW SKILL ▶ 14. Use the SUM function to compute the TOTALS for all columns, with the exception of the AVG and ERA columns. These columns require a different formula (provided in the next step) since you cannot sum averages.

   a. In cell C23, type **=SUM(C6:C22)**
   b. Use the AutoFill feature to copy this formula to cells D23 – K23 (**Note:** cell F23's formula will be changed in the next step)
   c. In cell B41, type **=SUM(B28:B40)**
   d. Use the AutoFill feature to copy this formula to cells C41 – I41 (**Note:** cell G41's formula will be changed in the next step.)

15. Compute the totals of the AVG and ERA columns as follows:
   a. Total AVG –> In cell F23, type **=E23/D23**
   b. Total ERA –> In cell G41, type **=F41/E41*9**
16. Display formulas in your spreadsheet by using <CTRL> plus ` to check for accuracy.
17. Carefully proofread your work for accuracy.

San Francisco Giants®

	A	B	C	D	E	F	G	H	I	J	K
1	Activity 14 Student Name										
2	SAN FRANCISCO GIANTS - WORLD SERIES CHAMPIONS 2010										
3											
4	PLAYER'S NAME	POS	GAMES	AB	HITS	AVG	RUNS	2B	3B	HR	RBI
5											
6	Aubrey Huff	1B	157	569	165		100	35	5	26	86
7	Pablo Sandoval	3B	152	563	151		61	34	3	13	63
8	Cody Ross	OF	153	525	141		71	28	3	14	65
9	Juan Uribe	SS	148	521	129		64	24	2	24	85
10	Andres Torres	OF	139	507	136		84	43	8	16	63
11	Freddy Sanchez	2B	111	431	126		55	22	1	7	47
12	Buster Posey	C	108	406	124		58	23	2	18	67
13	Aaron Rowand	OF	105	331	76		42	12	2	11	34
14	Pat Burrell	OF	96	289	77		41	16	0	18	51
15	Edgar Renteria	SS	72	243	67		26	11	2	3	22
16	Mike Fontenot	2B	103	240	68		24	13	3	1	25
17	Nate Schierholtz	OF	137	227	55		34	13	3	3	17
18	Travis Ishikawa	1B	116	158	42		18	11	0	3	22
19	Jose Guillen	OF	42	128	34		9	5	0	3	15
20	Eli Whiteside	C	56	126	30		19	6	1	4	10
21	Mark DeRosa	OF	26	93	18		9	3	0	1	10
22	Tim Lincecum	P	33	67	7		2	0	0	0	5
23	TOTALS										
24											
25											
26		WINS	LOSSES	GAMES	INNINGS	RUNS	ERA	SO	SAVES		
27											
28	Matt Cain	13	11	33	223.1	84		177	0		
29	Tim Lincecum	16	10	33	212.1	84		231	0		
30	Barry Zito	9	14	34	199.1	97		150	0		
31	Jonathan Sanchez	13	9	34	193.1	74		205	0		
32	Madison Bumgarner	7	6	18	111	40		86	0		
33	Brian Wilson	3	3	70	74.2	16		93	48		
34	Sergio Romo	5	3	68	62	16		70	0		
35	Todd Wellemeyer	3	5	13	58.2	37		41	0		
36	Javier Lopez	4	2	77	57.2	17		38	0		
37	Santiago Casilla	7	2	52	55.1	14		56	2		
38	Guillermo Mota	1	3	56	54	29		38	1		
39	Jeremy Affeldt	4	3	53	50	25		44	4		
40	Denny Bautista	2	0	31	33.2	14		44	0		
41	TOTALS										

Source: http://sanfrancisco.giants.mlb.com

Best Buy®

15

New Skills

1. Format a row's height in a spreadsheet.

Activity Overview

Best Buy® Co. is one of North America's specialty retailers of consumer electronics, personal computers, entertainment software, and appliances. It is a company that understands the importance of learning and innovation. From personal shopping assistants and the Geek Squad to Magnolia Home Theater, Test Drive, and the Small Business Center, there's a lot going on at Best Buy®. It is a company committed to offering a broad selection of products at competitive prices. Online prices and selection generally match those in stores.

The following activity illustrates how spreadsheets can be used to compute the discounted price and sales tax of Best Buy's® Xbox 360 top selling games in 2010.

Instructions

1. Create a NEW spreadsheet.

★ *Unless otherwise stated, the font should be 10 point Arial.*

2. Type the data as shown. In cell D4, type your name as the Sales Representative.
3. Format the width of column A to 65.0 and left align.
4. Bold cell A2 and change the font size to 14 point.
5. Bold rows 7 and 8.
6. Format the width of columns B – F to 10.0 and right align.
7. Bold cells C2 and C4 – D4 and left align.

NEW SKILL ▶

8. Select rows 10 – 26 and change the row height to 18.0.
9. Compute the formulas for the first Xbox 360 game as follows (assume the sales tax is 6.75%):
   a. SALE PRICE=LIST PRICE-DISCOUNT –> In cell D10, type **=B10-C10**
   b. SALES TAX=SALE PRICE*6.75% –> In cell E10, type **=D10*6.75%**
   c. FINAL PRICE=SALE PRICE+SALES TAX –> In cell F10, type **=D10+E10**
10. Format cells B10 – F26 as numbers displaying 2 decimal places.
11. Use the AutoFill feature to copy the formulas down for the remaining Xbox games.
12. Display formulas in your spreadsheet by using <CTRL> ` to check for accuracy.

Best Buy®

	A	B	C	D	E	F
1	Activity 15 Student Name					
2	BEST BUY		XBOX 360 GAMES ON SALE 9/30/2010			
3	Grove-Ohio (Store 292)					
4	3720 Grove Road		Sales Rep:	Student's Name		
5	Columbus, OH 43212					
6						
7		LIST		SALE	SALES	FINAL
8	XBOX 360 GAMES	PRICE	DISCOUNT	PRICE	TAX	PRICE
9						
10	Batman: Arkham Asylum	29.99	7.00			
11	Batman: Arkham Asylum Game of the Year Edition	49.99	18.00			
12	Cabela's Big Game Hunter 2010	39.99	16.50			
13	Disney/Pixar Toy Story 3	49.99	18.00			
14	Fight Night: Round 4	19.99	2.00			
15	Forza Motorsport 3	39.99	16.50			
16	Ghostbusters: The Video Game	19.99	2.00			
17	Hasbro Family Game Night 3	39.99	16.50			
18	James Cameron's Avatar: The Game	29.99	7.00			
19	Madden NFL 10	29.99	7.00			
20	NCAA Basketball 10	59.99	20.50			
21	Rock Band 2	29.99	7.00			
22	Skate 2	19.99	2.00			
23	Super Street Fighter IV	39.99	16.50			
24	The Beatles: Rock Band	29.99	7.00			
25	Transformers: War for Cybertron	59.99	20.50			
26	UFC Undisputed 2010	39.99	16.50			

Source: http://www.bestbuy.com