

26

Accounts Payable

New Skills

1. Format cells to percentages.

Activity Overview

Assume you work at the Game Stop store at your local mall. The owner has done his research and ordered the most popular games to fill the shelves in preparation for the upcoming holiday season. The games and their invoices recently arrived.

Vendors generally offer a cash discount for early payment to customers who buy on account. Your employer intends to pay the vendors within 15 days of receipt of the invoices in order to take advantage of the discounts offered. For the buyer, the discount is called a purchase discount; for the seller, it is called a sales discount. The owner asks you to help calculate what is owed to each vendor.

The following activity illustrates how spreadsheets can be used to calculate a company's purchase discounts, sales tax, and amount owed to vendors.

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 24.0 and left align.
4. Format the width of column B to 11.0 and right align.
5. Format cells B10 – B40 as numbers displaying 2 decimal places with a comma separator.
6. Format the width of column C to 11.0 and center align.
7. Format cells C10 – C35 as percentages displaying 0 decimal places.
8. Format the width of columns D – G to 11.0 and right align.
9. Format cells D10 – G40 as numbers displaying 2 decimal places with a comma separator.
10. Bold cell A2 and change the font size to 14 point.
11. Bold cell A3 and change the font size to 12 point.
12. Bold rows 7 and 8.

NEW SKILL ▶

#13 → #16 on back →

26

Accounts Payable

INPUT DATA

	A	B	C	D	E	F	G
1	Activity 26 Student Name						
2	GAME STOP						
3	Russell Plaza						
4	500 Russell Road						
5	Detroit, MI 48201						
6							
7		AMOUNT BILLED	% DISCOUNT	PURCHASE DISCOUNT	SUBTOTAL	SALES TAX	AMOUNT OWED
8	COMPANY						
9							
10	ABC Game Industries	630	0.04				
11	American Eagle	743	0.06				
12	Avalon Press	276	0.04				
13	British Isles Industries	300	0.04				
14	Cape Cod Game Company	987	0.06				
15	Championship Games	745	0.06				
16	Creative Merchandise Co.	734	0.06				
17	DZ Games	2495	0.02				
18	EA Sports	125	0.05				
19	Far East Games	243	0.03				
20	Fast Game Entertainment	875	0.05				
21	Firefight Games	985	0.02				
22	Funmaker Games	456	0.03				
23	Gale Force Gaming	800	0.02				
24	Game Crazy	1198	0.04				
25	Game Designers	983	0.02				
26	Game Masters Studio	358	0.02				
27	Game Developers, Ltd.	654	0.05				
28	Game Shop	250	0.04				
29	Hing Luen, Ltd.	589	0.02				
30	HK Hobbies	2389	0.07				
31	International Games, Ltd.	2039	0.05				
32	KG Game Works	645	0.03				
33	New England Games	738	0.06				
34	Party Games Plus	234	0.05				
35	Toys and Games	399	0.02				
36							
37	TOTALS						
38	AVERAGE						
39	MAXIMUM						
40	MINIMUM						

13. Compute the formulas for the first company, ABC Game Industries, as follows (assume the sales tax is 6%):

- $PURCHASE\ DISCOUNT = AMOUNT\ BILLED * \% \ DISCOUNT$ → In cell D10, type =B10*C10
- $SUBTOTAL = AMOUNT\ BILLED - PURCHASE\ DISCOUNT$ → In cell E10, type =B10-D10
- $SALES\ TAX = 6\% * SUBTOTAL$ → In cell F10, type =6%*E10
- $AMOUNT\ OWED = SUBTOTAL + SALES\ TAX$ → In cell G10, type =E10+F10

14. Use the AutoFill feature to copy the formulas down for the remaining companies.

15. Enter formulas to calculate the Totals, Average, Maximum, and Minimum for column B and columns D – G.

16. Bold rows 37 – 40.

Complete
13 → 16

L.A. Lakers® 2

New Skills

1. Cut, copy, and paste data.
2. Use sets of parentheses in formulas.

Activity Overview

This activity expands on the L.A. Lakers® spreadsheet created in Activity 4. This activity illustrates how spreadsheets can be used to record:

1. The players, their uniform number, their position, and games played.
2. Field goals made, attempted, and percentage.
3. Three-point shots made, attempted, and percentage.
4. Free throws made, attempted, and percentage.
5. Total points scored and scoring average.

Instructions

1. Open the file L.A. LAKERS previously created in Activity 4.
- * Unless otherwise stated, the font should be 10 point Arial.
2. Change the Activity # in row 1 to read Activity 27.
3. Type the additional data as shown in columns E – O.
4. Copy cell A2 to cells E2 and K2.
5. Cut cell A4 and paste it in to cell E4.
6. Bold cells E9 – O9.
7. Format the width of columns D – O to 7.0.
8. Select cells E9 – O22 and right align.
9. Format column O as numbers displaying 1 decimal place.
10. Format columns G, J, and M as percentages displaying 1 decimal place.
11. Compute the formulas for the first player as follows (See Table 27-1 to interpret the abbreviations used in each column):
 - a. PCT (Percentage of field goals made)=FGM/FGA → In cell G10, type =E10/F10
 - b. PCT (Percentage of three-point shots made)=3PM/3PA → In cell J10, type =H10/I10
 - c. PCT (Percentage of free throws made)=FTM/FTA → In cell M10, type =K10/L10
 - d. PTS (Total points scored)=(FGM*2)+(3PM*3)+FTM → In cell N10, type =(E10*2)+(H10*3)+K10
 - e. AVG (Average points per game)=PTS/GAMES PLAYED → In cell O10, type =N10/D10
12. Use the AutoFill feature to copy the formulas down for the remaining players.

NEW SKILL

NEW SKILL

NEW SKILL

Table 27-1
on
back...



INPUT DATA

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	Activity 4														
2	N.B.A. CHAMPIONS														
3	L.A. LAKERS														
4	2010-2011 Roster														
5															
6	Head Coach: Phil Jackson														
7															
8															
9	PLAYER	JERSEY NUMBER	POSITION PLAYED	GAMES PLAYED	FGM	FGA	PCT	3PM	3PA	PCT	FTM	FTA	PCT	PTS	AVG
10	Kobe Bryant	24	G	23	234	511	49	131	154	183					
11	Pau Gasol	16	F-C	23	165	306	0	3	120	158					
12	Ron Artest	37	F	23	101	254	34	117	22	38					
13	Derek Fisher	2	G	23	82	183	27	75	46	56					
14	Lamar Odom	7	F	23	91	194	10	41	30	50					
15	Andrew Bynum	17	C	23	80	149	0	1	38	56					
16	Shannon Brown	12	G	23	42	107	9	32	20	28					
17	Jordan Farmar	5	G	23	38	94	20	50	9	13					
18	Adam Morrison	6	F	2	4	9	0	2	0	1					
19	Sasha Vujacic	18	G	10	10	23	6	15	2	6					
20	Dijter Ilunga-Mbenga	28	C	3	2	6	0	1	1	1					
21	Luke Walton	4	F	16	7	23	2	9	2	4					
22	Josh Powell	21	F	13	3	8	0	1	3	4					

Abbreviations interpreted:

- FGM Field Goals Made
- FGA Field Goals Attempted
- 3PM Three-Point Shots Made
- 3PA Three-Point Shots Attempted
- FTM Free Throws Made
- FTA Free Throws Attempted
- PTS Total Points Scored
- AVG Average Points Per Game

TABLE 27-1

Source: <http://www.nba.com/lakers/>

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Quarterback Statistics

NEW SKILL

1. Change cell shading.

ACTIVITY OVERVIEW

Statistics play an important role in any sport. They are used in evaluating team performance as well as the performance of individual players. Football statistics are very simple to understand and compute.

The following activity illustrates how spreadsheets can be used to compute the completion percentage of NFL® quarterbacks during the 2009 season. In this activity, you will be applying cell shading to enhance the appearance of a spreadsheet.

Instructions

1. Create a NEW spreadsheet.
- * *Unless otherwise stated, the font should be 10 point Arial.*
2. Type the data as shown.
3. Bold cell A2 and change the font size to 16 point.
4. Format the width of columns B and C to 20.0 and left align.
5. Center align cells A5 – A30 and cells D5 – G30.
6. Compute the formula for the first player's PCT (Completion Percentage) as follows:
 - a. $PCT(\text{Completion Percentage}) = \frac{CMP(\text{Completed Passes})}{ATT(\text{Attempted Passes})}$ → In cell G7, type =F7/E7
7. Use the AutoFill feature to copy the formula down for PCT for the remaining players.
8. Format cells G7 – G30 as percentages displaying 1 decimal place.
9. Change the shading for cells A5 – G5 to light gray.
10. Bold row 5.
11. Display formulas in your spreadsheet by using <CTRL> + * to check for accuracy.
12. Carefully proofread your work for accuracy.
13. Save the spreadsheet as QUARTERBACK STATISTICS.
14. Analyze the changes made to the data in the spreadsheet.
15. Set the Print Area to include all cells containing data in the spreadsheet.
16. Print Preview and adjust the Page Setup so that the spreadsheet fits on one page.
17. Print a copy of the spreadsheet if required by your instructor.

NEW SKILL



Quarterback Statistics

INPUT DATA

	A	B	C	D	E	F	G
1	Activity 28 Student Name						
2	NFL® 2009 Quarterback Statistics						
3							
4							
5	RANK	PLAYER	TEAM	YDS	ATT	CMP	PCT
6							
7	1	Matt Schaub	Houston Texans	4770	583	396	
8	2	Peyton Manning	Indianapolis Colts	4500	571	393	
9	3	Tom Brady	New England Patriots	4398	565	371	
10	4	Drew Brees	New Orleans Saints	4388	514	363	
11	5	Brett Favre	Minnesota Vikings	4202	531	363	
12	6	Aaron Rodgers	Green Bay Packers	4434	541	350	
13	7	Tony Romo	Dallas Cowboys	4483	550	347	
14	8	Kurt Warner	Arizona Cardinals	3753	513	339	
15	9	Ben Roethlisberger	Pittsburgh Steelers	4328	506	337	
16	10	Jay Cutler	Chicago Bears	3666	555	336	
17	11	Kyle Orton	Denver Broncos	3802	541	336	
18	12	Jason Campbell	Washington Redskins	3618	507	327	
19	13	Eli Manning	New York Giants	4021	509	317	
20	14	Philip Rivers	San Diego Chargers	4254	486	317	
21	15	Joe Flacco	Baltimore Ravens	3613	499	315	
22	16	David Garrard	Jacksonville Jaguars	3597	516	314	
23	17	Matt Hasselbeck	Seattle Seahawks	3029	488	293	
24	18	Carson Palmer	Cincinnati Bengals	3094	466	282	
25	19	Chad Henne	Miami Dolphins	2878	451	274	
26	20	Matt Cassel	Kansas City Chiefs	2924	493	271	
27	21	Donovan McNabb	Philadelphia Eagles	3553	443	267	
28	22	Matt Ryan	Atlanta Falcons	2916	451	263	
29	23	Alex Smith	San Francisco 49ers	2350	372	225	
30	24	Matthew Stafford	Detroit Lions	2267	377	201	

Source: www.nfl.com/stats

29

M&M'S® Candy

New Skills

1. Format cells as fractions.

Activity Overview

Assume that your instructor has brought in a treat for the entire class – the new pretzel M&M's®. You are handed a bag of 150 multi-colored candies (nice teacher). The only stipulation before you eat them is that you must figure out what fraction of each color you are eating.

The following activity illustrates how spreadsheets can be used to format cells as fractions.

Instructions

1. Create a NEW spreadsheet.
- ★ *Unless otherwise stated, the font should be 10 point Arial.*
2. Type the data as shown.
3. Bold cell A2 and change the font size to 20 point.
4. Bold, underline, and center row 5 and change the font size to 12 point.
5. Format the width of column A to 20.0 and center align.
6. Format the width of column B to 18.0 and center align.
7. Format the width of column C to 23.0 and center align.
8. Format the width of column D to 10.0 and center align.
9. Format column D as fractions, up to 1 digit.
10. Carefully proofread your work for accuracy.
11. Save the spreadsheet as M&MS CANDY.
12. Analyze the changes made to the data in the spreadsheet.
13. Set the Print Area to include all cells containing data in the spreadsheet.
14. Print Preview and adjust the Page Setup so that the spreadsheet fits on one page.
15. Print a copy of the spreadsheet if required by your instructor.

NEW SKILL ▶



M&M'S® Candy

INPUT DATA

	A	B	C	D
1	Activity 29 Student Name			
2	M&M's®			
3				
4				
5	Color	Number in Bag	Total Candy in Bag	Fraction
6	Blue	25	150	0.17
7	Green	19	150	0.13
8	Brown	17	150	0.11
9	Orange	16	150	0.11
10	Red	20	150	0.13
11	Purple	24	150	0.16
12	Black	29	150	0.19

30

NBA® Standings

New Skills

1. Insert and delete rows.

Activity Overview

The National Basketball Association (NBA) is one of the most popular sports organizations in the world. It is a professional basketball league that is now played by more than 250 million people worldwide in an organized fashion, as well as by countless others in "pick-up" games.

In the regular season, each NBA® team plays 82 games, which are divided evenly between home and away games. Schedules are not identical for all teams. A team faces opponents in its own division four times a year, teams from the other two divisions in its conference either three or four times a year, and teams in the other conference two times each.

The following activity illustrates how newspapers use spreadsheets to list the NBA® Standings so sports enthusiasts can see how their favorite teams are doing as compared to other teams in the NBA®.

Instructions

1. Create a NEW spreadsheet.
- * Unless otherwise stated, the font should be 10 point Arial.
2. Type the data as shown.
- NEW SKILL** ▶ 3. Delete rows 5 and 28 simultaneously (Hint: Click and hold <CTRL> to select both rows).
- NEW SKILL** ▶ 4. Insert a row above EASTERN CONFERENCE.
5. Format the width of column A to 26.0 and columns B – E to 8.0.
6. Bold row 2 and change the font size to 16 point.
7. Bold rows 5 and 27 and change the font size to 14 point.
8. Bold rows 6, 13, 20, 28, 35, and 42 and change the font size to 12 point.
9. Compute the formula for PCT (Percentage Won) for the first game as follows:
 - a. $PCT(\text{Percentage Won}) = W / (W + L) \rightarrow$ (Note: W=Wins, L=Losses) In cell D7, type $=B7 / (B7 + C7)$
 - b. In cell D7, type $=B7 / (B7 + C7)$
- * Note: You will compute the GB (Games Back) column in Activity 49.
10. Copy and paste the PCT formula in cell D7 for the remaining teams in each division in column D.
11. Format column D as numbers displaying 3 decimal places.
12. Center align columns B – E.
13. Display formulas in your spreadsheet by using <CTRL>+` to check for accuracy.
14. Carefully proofread your work for accuracy.

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NBA® Standings

INPUT DATA

	A	B	C	D	E
1	Activity 30 Student Name				
2	NBA® Standings		2009-2010 Division Standings		
3					
4	EASTERN CONFERENCE				
5					
6	ATLANTIC DIVISION	W	L	PCT	GB
7	Boston Celtics		50	32	
8	Toronto Raptors		40	42	
9	New York Knicks		29	53	
10	Philadelphia 76ers		27	55	
11	New Jersey Nets		12	70	
12					
13	CENTRAL DIVISION	W	L	PCT	GB
14	Cleveland Cavaliers		61	21	
15	Milwaukee Bucks		46	36	
16	Chicago Bulls		41	41	
17	Indiana Pacers		32	50	
18	Detroit Pistons		27	55	
19					
20	SOUTHEAST DIVISION	W	L	PCT	GB
21	Orlando Magic		59	23	
22	Atlanta Hawks		53	29	
23	Miami Heat		47	35	
24	Charlotte Bobcats		44	38	
25	Washington Wizards		26	56	
26					
27	WESTERN CONFERENCE				
28					
29	NORTHWEST DIVISION	W	L	PCT	GB
30	Dallas Mavericks		55	27	
31	San Antonio Spurs		50	32	
32	Houston Rockets		42	40	
33	Memphis Grizzlies		40	42	
34	New Orleans Hornets		37	45	
35					
36	PACIFIC DIVISION	W	L	PCT	GB
37	Denver Nuggets		53	29	
38	Utah Jazz		53	29	
39	Portland Trailblazers		50	32	
40	Oklahoma City Thunder		50	32	
41	Minnesota Timberwolves		15	67	
42					
43	SOUTHWEST DIVISION	W	L	PCT	GB
44	L.A. Lakers		57	25	
45	Phoenix Suns		54	28	
46	L.A. Clippers		29	53	
47	Golden State Warriors		26	56	
48	Sacramento Kings		25	57	

Source: www.sports.yahoo.com/nba/