**Drexel University • Westphal College of Media Arts and Design • Design and Merchandising**

DSMR 232 -4.0 credit • Retail Merchandising Planning (Winter 2023)

# **Assignment F:** Preparing Buying Plans

## CREATING AND USING YOUR OWN SPREADSHEET

1. Download and Open file SPREADSHEET F.
2. Input formulas to calculate (1) planned monthly sales, (2) planned monthly BOM, (3) planned monthly EOM, (4) planned monthly reductions, (5) planned purchases at retail, and (6) planned purchases at cost. Make calculations for the problems found below and record all your answers on the tables provided at the end of this assignment.
3. When you have completed the lesson, save the file as SPREADSHEET F\_COPY, and close the file.

## PROBLEMS

1. Last year’s sales for the 6-month period of February to July were $589,345. A 5 percent increase in sales is anticipated this year. Total reductions for the period are planned at 8 percent. The initial markup is planned at 53.9 percent. The buyer desires an ending inventory of $190,000 for the period. Based on an analysis of past sales records and current market trends, the buyer has also made plans for the period in relation to (1) monthly distribution of sales, (2) monthly stock- to-sales ratios, and (3) monthly distribution of planned reductions. These three planning estimates for each month are as follows:

|  |  |  |  |
| --- | --- | --- | --- |
|  | Sales |  | Reductions |
| Month | Distribution | Stock-to-Sales Ratio | Distribution |
| Feb | 10% | 2.4 | 5% |
| Mar | 10% | 2.4 | 5% |
| Apr | 35% | 2.1 | 10% |
| May | 20% | 2.0 | 20% |
| June | 15% | 2.0 | 30% |
| July | 10% | 2.0 | 30% |

Calculate (1) planned monthly sales, (2) planned monthly BOM, (3) planned monthly EOM, (4) planned monthly reductions, (5) planned purchases at retail, and (6) planned purchases at cost.

1. For the information presented in Problem 1, you have decided that changes must be made in only the sales distribution estimates. Recalculate your answers based on the following changes in sales distribution:

|  |  |
| --- | --- |
| Feb | 12% |
| Mar | 13% |
| Apr | 30% |
| May | 22% |
| June | 13% |
| July | 10% |

1. Using all the original estimates presented in Problem 1 except the stock-to-sales ratios, make recalculations based on the following changes in planned stock-to-sales ratios:

Feb 2.3

Mar 2.3

Apr 2.0

May 2.0

June 2.0

July 2.0

1. Using all the original estimates presented in Problem 1 except the planned distribution of reductions, make recalculations based on the following changes in planned distribution of reductions:

|  |  |
| --- | --- |
| Feb | 0% |
| Mar | 0% |
| Apr | 15% |
| May | 25% |
| June | 30% |
| July | 30% |

1. Using all the original estimates presented in Problem 1 except the figure for total planned reductions, recalculate your planned monthly figures if total planned reductions are increased to 13 percent.

# Assignment F: Preparing Buying Plans

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Problem 1 | FEB | MAR | APR | MAY | JUNE | JULY |
| Planned BOM | 148,515 | 148,515 | 454,827 | 247,525 | 185,644 | 123,762 |
| Planned Sales | 61,881 | 61.881 | 216,584 | 123,762 | 92,822 | 61.881 |
| Planned Reductions | 2,475 | 2,475 | 4,950 | 9,901 | 14,851 | 14,851 |
| Planned Purchases at Retail | 64,356 | 370,669 | 14,233 | 71,782 | 45,792 | 142,970 |
| Planned Purchases at Cost | 29,668 | 170,879 | 6,561 | 33,092 | 21110 | 65,909 |
| Planned EOM | 148,515 | 454,827 | 247,525 | 185,644 | 123,763 | 190000 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Problem 2 | FEB | MAR | APR | MAY | JUNE | JULY |
| Planned BOM | 178,217.93 | 193,069 | 389,852 | 272,277 | 160,891 | 123,762 |
| Planned Sales | 74,257.5 | 80,445 | 185,643.7 | 136,138.7 | 80,445.6 | 61,881.2 |
| Planned Reductions | 2,475.25 | 2,475.25 | 4,950.5 | 9,901 | 14,851.49 | 14,851.49 |
| Planned Purchases at Retail | 91,584.2 | 279,703.1 | 73,019.9 | 34,652.5 | 58,168.4 | 142,970.3 |
| Planned Purchases at Cost | 42,220.3 | 128,943.2 | 33,662.2 | 15,975.3 | 26,815.6 | 65,909.3 |
| Planned EOM | 193,069.4 | 389,851.7 | 272,277.4 | 160,891.2 | 123,762.5 | 190,000 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Problem 3 | FEB | MAR | APR | MAY | JUNE | JULY |
| Planned BOM | 148,326.8 | 148,326.8 | 433,169 | 247,525 | 185,644 | 123,763 |
| Planned Sales | 61,881.2 | 61,881.2 | 216,584.3 | 123,762.5 | 92,821.8 | 61,881.2 |
| Planned Reductions | 2,475.25 | 2,475.25 | 4,950.5 | 9,901 | 14,851.49 | 14,851.49 |
| Planned Purchases at Retail | 64,356.5 | 355,198.2 | 35,891.1 | 71,782.2 | 45,792.1 | 142,970.3 |
| Planned Purchases at Cost | 29,668.3 | 170,878.2 | 6,561.3 | 33,091.6 | 21,110.2 | 65,909.3 |
| Planned EOM | 148,514.9 | 454,827 | 247,524.9 | 185,643.7 | 123,762.5 | 190,000 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Problem 4 | FEB | MAR | APR | MAY | JUNE | JULY |
| Planned BOM | 148,514.94 | 148,514.94 | 454,827 | 247,525 | 185,644 | 123,763 |
| Planned Sales | 61,881.2 | 61,881.2 | 216,584.3 | 123,762.5 | 92,821.8 | 61,881.2 |
| Planned Reductions | 0.00 | 0.00 | 7,425.75 | 12,376.25 | 14,851.49 | 14,851.49 |
| Planned Purchases at Retail | 61,881.2 | 368,193.4 | 16,707.9 | 74,257.5 | 45,792.1 | 142,970.3 |
| Planned Purchases at Cost | 28,527.2 | 169,737.1 | 7,702.4 | 34,232.7 | 21,110.2 | 65,909.3 |
| Planned EOM | 148,514.9 | 454,827 | 247,524.9 | 185,643.7 | 123,762.5 | 190,000 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Problem 5 | FEB | MAR | APR | MAY | JUNE | JULY |
| Planned BOM | 148,514.94 | 148,514.94 | 454,827 | 247,525 | 185,644 | 123,763 |
| Planned Sales | 61,881.2 | 61,881.2 | 216,584.3 | 123,762.5 | 92,821.8 | 61,881.2 |
| Planned Reductions | 4,022.28 | 4,022.28 | 8,044.56 | 16,089.12 | 24,133.68 | 24,133.68 |
| Planned Purchases at Retail | 65,903.5 | 372,215.6 | 17.326.7 | 77,970.3 | 55,074.3 | 152,252.5 |
| Planned Purchases at Cost | 30,381.5 | 171,591.4 | 7,987.6 | 35,944.3 | 25,389.3 | 70,188.4 |
| Planned EOM | 148,514.9 | 454,827 | 247,524.9 | 185,643.7 | 123,762.5 | 190,000 |