

BMTH 010– TEST 4 FORMULA SHEET

Chapter 5: Mathematics of Merchandising

Discounts

NOTATION

L = List price

N = Net price

D = Amount of Trade Discount, Amount of Markdown

d = Trade discount rate

d_e = Single equivalent trade discount rate

FORMULAS

$$D = d \times L$$

$$N = L - D$$

$$N = L (1 - d)$$

$$N = L (1 - d_1) (1 - d_2) (1 - d_3) \dots (1 - d_n)$$

$$d_e = 1 - [(1 - d_1) (1 - d_2) (1 - d_3) \dots (1 - d_n)]$$

Markup

NOTATION

C = Cost

M = Amount of Markup

S = Selling price

P = Profit

E = Expenses, Overhead

FORMULAS

$$S = C + M$$

$$M = E + P$$

$$S = C + E + P$$

$$\text{Rate of Markup on Cost} = \frac{M}{C} \times 100$$

$$\text{Rate of Markup on Selling Price} = \frac{M}{S} \times 100$$

Chapter 8: Simple Interest and Applications

NOTATION

I = Amount of Interest

P = Principal

r = Simple Interest Rate

t = Time Period

S = Maturity Value

FORMULAS

$$I = Prt$$

$$S = P + I$$

$$S = P(1 + rt)$$

Table to Determine the Number of Days in a Time Period

DAY OF MONTH	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	DAY OF MONTH
1	1	32	60	91	121	152	182	213	244	274	305	335	1
2	2	33	61	92	122	153	183	214	245	275	306	336	2
3	3	34	62	93	123	154	184	215	246	276	307	337	3
4	4	35	63	94	124	155	185	216	247	277	308	338	4
5	5	36	64	95	125	156	186	217	248	278	309	339	5
6	6	37	65	96	126	157	187	218	249	279	310	340	6
7	7	38	66	97	127	158	188	219	250	280	311	341	7
8	8	39	67	98	128	159	189	220	251	281	312	342	8
9	9	40	68	99	129	160	190	221	252	282	313	343	9
10	10	41	69	100	130	161	191	222	253	283	314	344	10
11	11	42	70	101	131	162	192	223	254	284	315	345	11
12	12	43	71	102	132	163	193	224	255	285	316	346	12
13	13	44	72	103	133	164	194	225	256	286	317	347	13
14	14	45	73	104	134	165	195	226	257	287	318	348	14
15	15	46	74	105	135	166	196	227	258	288	319	349	15
16	16	47	75	106	136	167	197	228	259	289	320	350	16
17	17	48	76	107	137	168	198	229	260	290	321	351	17
18	18	49	77	108	138	169	199	230	261	291	322	352	18
19	19	50	78	109	139	170	200	231	262	292	323	353	19
20	20	51	79	110	140	171	201	232	263	293	324	354	20
21	21	52	80	111	141	172	202	233	264	294	325	355	21
22	22	53	81	112	142	173	203	234	265	295	326	356	22
23	23	54	82	113	143	174	204	235	266	296	327	357	23
24	24	55	83	114	144	175	205	236	267	297	328	358	24
25	25	56	84	115	145	176	206	237	268	298	329	359	25
26	26	57	85	116	146	177	207	238	269	299	330	360	26
27	27	58	86	117	147	178	208	239	270	300	331	361	27
28	28	59	87	118	148	179	209	240	271	301	332	362	28
29	29		88	119	149	180	210	241	272	302	333	363	29
30	30		89	120	150	181	211	242	273	303	334	364	30
31	31		90		151		212	243		304		365	31