

True/False

Johnson: "Old" test exam #3

ACCT 102

- F 1. An unfavorable cost variance occurs when budgeted cost at actual volumes exceeds actual cost. Favorable
- F 2. Standard costs should be revised when they differ from actual costs. Just because you miss a target doesn't mean you change standard.
- T 3. The standard cost is how much a product should cost to manufacture.

Multiple Choice

- A 4. A series of budgets for varying rates of activity is termed a(n):
 - a. flexible budget
 - b. variable budget
 - c. master budget
 - d. activity budget
- C 5. The first budget customarily prepared as part of an entity's master budget is the:
 - a. production budget
 - b. cash budget
 - c. sales budget
 - d. direct materials purchases

- B 6. For January, sales revenue is \$600,000; sales commissions are 5% of sales; the sales manager's salary is \$96,000; advertising expenses are \$80,000; shipping expenses total 2% of sales; and miscellaneous selling expenses are \$2,100 plus 1/2 of 1% of sales. Total selling expenses for the month of January are:

Comm (600,000 x .05)	30,000
Sales Man. Sal.	96,000
Adv. Exp.	80,000
Shipping (600,000 x .02)	12,000
Misc. (2,100 + (.005 x 600,000) x 1/2)	5,100
<u>Total.</u>	<u>223,100</u>

 - a. \$157,100
 - b. \$223,100
 - c. \$183,750
 - d. \$182,100

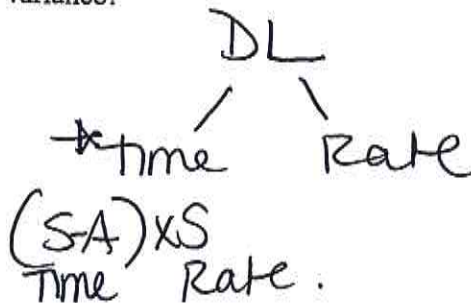
- B 7. The production budgets are used to prepare which of the following budgets?
 - a. Operating expenses
 - b. Direct materials purchases, direct labor cost, factory overhead cost
 - c. Sales in dollars
 - d. Sales in units

- D 8. The following data relate to direct labor costs for the current period:

Standard costs	7,500 hours at \$11.60
Actual costs	6,000 hours at \$12.00

What is the direct labor time variance?

- a. \$3,000 favorable
- b. \$15,000 unfavorable
- c. \$2,400 favorable
- d. \$17,400 favorable



$$\left(\frac{7500 - 6000}{\text{Hrs}} \right) \times 11.60$$

$$1500 \text{ Hr. F} \times 11.60 = 17,400 \text{ F}$$

B9

The standard costs and actual costs for direct materials, direct labor, and factory overhead for the manufacture of 2,500 units of product are as follows:

Direct materials
Direct labor

Standard Costs

2,500 kilograms @ \$8
7,500 hours @ \$12

Direct materials
Direct labor

Actual Costs

2,600 kilograms @ \$8.75
7,400 hours @ \$11.40

Factory overhead (100% capacity - 10,000 hrs.):

Variable cost @ \$2 per hour
Total variable cost, \$18,000
Fixed cost @ \$.80 per hour
Total fixed cost, \$8,000

The amount of the direct materials quantity variance is:

- a. \$875 favorable
- b. \$800 unfavorable
- c. \$800 favorable
- d. \$875 unfavorable

DM
Qty
Price
 $(S - A) \times \text{Qty} \times \text{price}$
 $(2500 - 2600 \text{ kg}) \times 8 =$

B

10 Wright Corporation began its operations on September 1 of the current year. Budgeted sales for the first three months of business are \$240,000, \$300,000, and \$420,000, respectively, for September, October, and November. The company expects to sell 20% of its merchandise for cash. Of sales on account, 70% are expected to be collected in the month of the sale, 25% in the month following the sale, and the remainder in the following month. The cash collections from accounts receivable in September are:

- a. \$240,000
- b. \$134,400
- c. \$192,000
- d. \$168,000

Sept.
Cash Sales N/A
Collections on Acct. = 134,400

$240,000 \times 80\% \text{ on acct} \times 70\% \text{ collected in same mo}$

C

11 The standard costs and actual costs for direct materials, direct labor, and factory overhead for the manufacture of 2,500 units of product are as follows:

Direct materials
Direct labor

Standard Costs

2,600 kilograms @ \$8.75
7,400 hours @ \$11.40

Direct materials
Direct labor

Actual Costs

2,500 kilograms @ \$8
7,500 hours @ \$12

Factory overhead (100% capacity - 10,000 hrs.):

Variable cost @ \$2.08 per hour
Total variable cost, \$18,720
Fixed cost @ \$.83 per hour
Total fixed cost, \$8,320

The amount of direct materials price variance is:

- a. \$1,875 unfavorable
- b. \$1,950 favorable
- c. \$1,875 favorable
- d. \$1,950 unfavorable

DM
Qty Price
 $(S - A) \times \text{Qty} \times \text{price}$
 $8.75 - 8.00 \times 2500$

Cash Mfg. Costs

75% Same Mo. 25% Following Mo.

A12

Kidder Company began its operations on March 31 of the current year. Projected manufacturing costs for the first three months of business are \$156,800, \$195,200, and \$217,600, respectively, for April, May, and June. Depreciation, insurance, and property taxes represent \$28,800 of the estimated monthly manufacturing costs. Insurance was paid on March 31, and property taxes will be paid in November. Three-fourths of the remainder of the manufacturing costs are expected to be paid in the month in which they are incurred, with the balance to be paid in the following month. The cash payments for manufacturing in the month of May are:

a. \$156,800	prod costs	April	156,800	#. May	195,200	April Cost Pd = 3200
b. \$195,200	less non cash	(28,800)		(28,800)		(128,000 x 25%)
c. \$166,400	prod costs to be pd	128,000		166,400		+ May costs (166,400 x 75%)
d. \$146,400						12480

C 13

- Which of the following conditions normally would not indicate that standard costs should be revised?
- a. The engineering department has revised product specifications in responding to customer suggestions. = Δ
 - b. The company has signed a new union contract which increases the factory wages on average by \$2.00 an hour. = Δ
 - c. Actual costs differed from standard costs for the preceding week. not necessarily
 - d. The world price of raw materials increased. = Δ

C

- 14 Which of the following budgets provides the starting point for the preparation of the direct labor cost budget?
- a. Direct materials purchases budget
 - b. Cash budget
 - c. Production budget
 - d. Sales budget
- based on # units to be produced

B

15 The following data relate to direct labor costs for the current period:

Standard costs	6,000 hours at \$12.00
Actual costs	7,500 hours at \$11.60

What is the direct labor rate variance?

- a. \$15,000 unfavorable
- b. \$3,000 favorable
- c. \$17,400 unfavorable
- d. \$2,400 favorable

DL
Time Rate
 $(S - A) \times A$
 $(12.00 - 11.60) \times 7500 = 3000 F$

A 16

Mancini Corporation sells a single product. Budgeted sales for the year are anticipated to be 640,000 units, estimated beginning inventory is 108,000 units, and desired ending inventory is 90,000 units. The quantities of direct materials expected to be used for each unit of finished product are given below.

*Material A	.50 lb. per unit @ \$.60 per pound
Material B	1.00 lb. per unit @ \$1.70 per pound
Material C	1.20 lb. per unit @ \$1.00 per pound

Prod: #units to be sold	640,000
+ Des. EI	+ 90,000
- Beg Inv	(108,000)

The amount of direct material A purchased during the year is:

- a. \$186,600
- b. \$181,200
- c. \$240,000
- d. \$210,600

units to be produced. 622,000

Material A Requirements

$\# 622,000 \times .5 \text{ lbs} \times .60 = 186,600$
per unit per lb

17. Below is budgeted production and sales information for Fleming Company for the month of December:

	<u>Product XXX</u>	<u>Product ZZZ</u>
Estimated beginning inventory	30,000 units	18,000 units
Desired ending inventory	32,000 units	15,000 units
Region I, anticipated sales	320,000 units	260,000 units
Region II, anticipated sales	190,000 units	130,000 units

The unit selling price for product XXX is \$5 and for product ZZZ is \$14. Budgeted production for product XXX during the month is:

- a. 510,000 units
- b. 512,000 units
- c. 542,000 units
- d. 572,000 units

18. McCabe Manufacturing Co.'s static budget at 8,000 units of production includes \$40,000 for direct labor and \$4,000 for electric power. Total fixed costs are \$23,000. At 9,000 units of production, a flexible budget would show:

- a. variable costs of \$49,500 and \$25,875 of fixed costs
- b. variable costs of \$44,000 and \$23,000 of fixed costs
- c. variable costs of \$49,500 and \$23,000 of fixed costs
- d. variable and fixed costs totaling \$75,375

- Problems -

Standard costs and actual costs incurred for the manufacture of 8,000 units of product were as follows:

<u>Standard Costs</u>	<u>Actual Costs</u>
Direct materials: 8,000 lbs. @ \$30.00	7,750 lbs. @ \$30.20
Direct labor: 10,000 hours @ \$36.00	10,250 hours @ \$38.00
Factory overhead: Rates per direct labor hour, based on 100% capacity of 16,000 labor hours:	
Variable cost \$15.00	\$189,400 total variable cost
Fixed cost \$10.00	\$100,000 total fixed cost

Determine (a) the quantity variance, price variance, and total direct materials cost variance; (b) the time variance, rate variance, and total direct labor cost variance:

Based on the following production and sales data of Concrete Co. for March of the current year, prepare (a) a sales budget and (b) a production budget.

	<u>Product T</u>	<u>Product X</u>
Estimated inventory, March 1	27,000 units	21,000 units
Desired inventory, March 31	32,000 units	15,000 units
Expected sales volume:		
Area I	310,000 units	250,000 units
Area II	190,000 units	130,000 units
Unit sales price	\$6	\$14

Trapp Co. was organized on August 1 of the current year. Projected sales for the next three months are as follows:

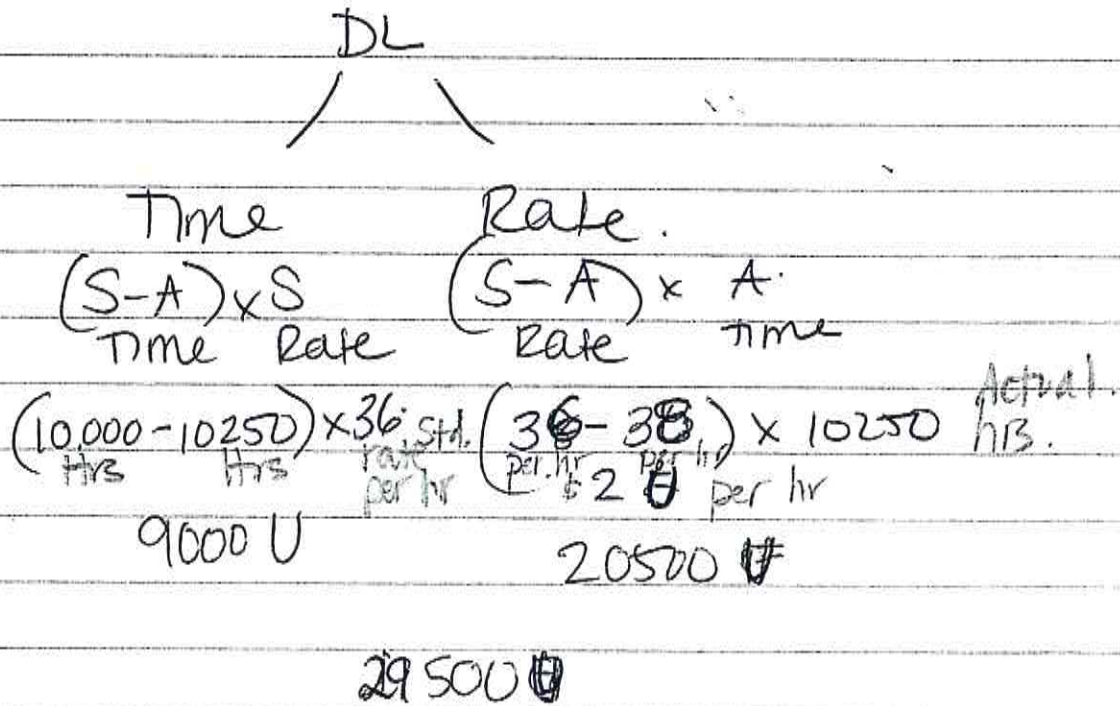
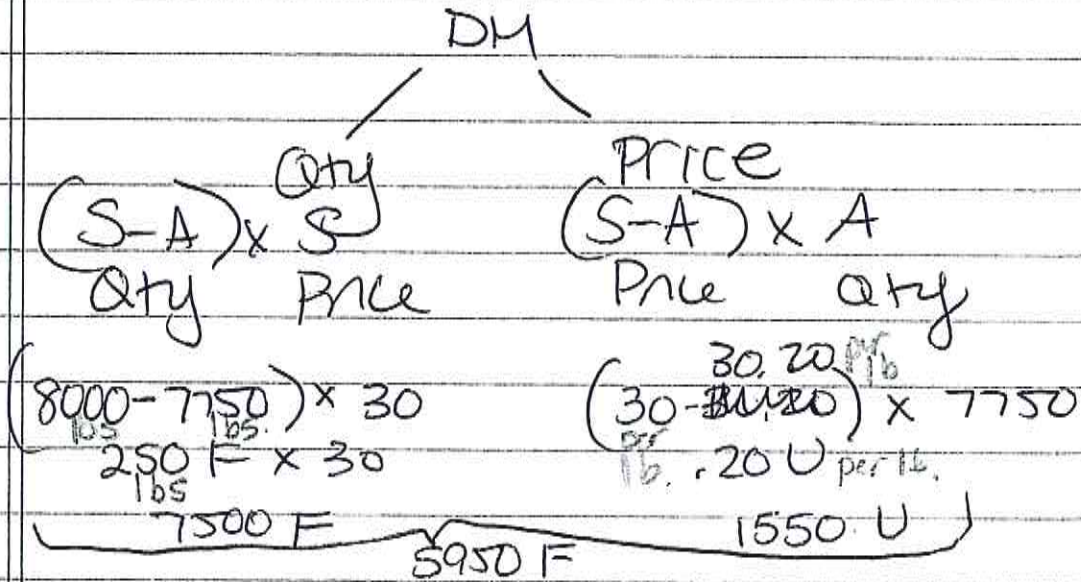
August	\$100,000
September	185,000
October	225,000

The company expects to sell 35% of its merchandise for cash. Of the sales on account, one third are expected to be collected in the month of the sale and the remainder in the following month.

Prepare a schedule indicating cash collections for August

①

Done in class today Practice Problems



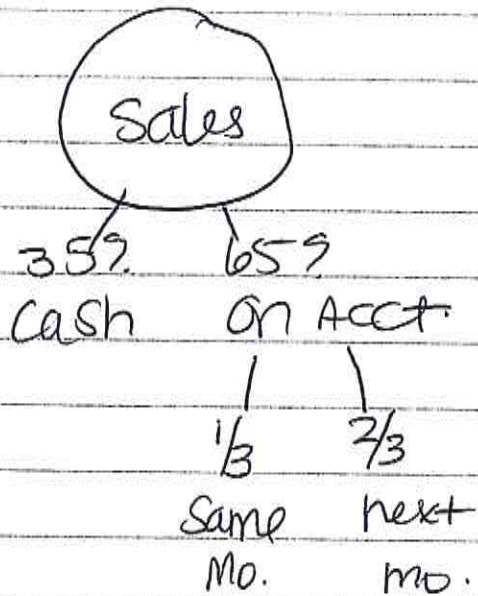
② a Sales Budget

	T	X
Sales Volume		
Area 1	310,000	250,000
Area 2	<u>190,000</u>	<u>130,000</u>
Units to be sold	500,000	380,000
x Selling price	x 6	x 14
\$	<u><u>3,000,000</u></u>	<u><u>5,320,000</u></u>

(b) Production Budget

	T	X
Units to be sold	500,000 ←	→ 380,000
+ Des. EI	32,000	15,000
- Beg Inv	<u><27,000></u>	<u><21,000></u>
Units to be produced	<u><u>505,000</u></u>	<u><u>374,000</u></u>

3



August.

Cash sales. \$ 35000
(100,000 x 35%)
Avg sales x 3/4 cash

Collections on Acct

Avg. \$
(65,000) 2,1667
100,000 x 65%
Avg sales x 2/3 on acct. 65,000 x 1/3

Total Cash In \$ 56,667

Review For Test Schmid

Chapter 19 Alternative Demonstration Problem

Major Company began operations on January 1, 2013. Cost and sales information for its first two calendar years are summarized below:

Manufacturing costs:

Direct materials \$50 per unit
 Direct labor \$25 per unit

Factory overhead costs for the year:

Variable overhead \$10 per unit
 Fixed overhead \$1,000,000 ÷ 100,000 = 10 per unit

Nonmanufacturing costs:

Variable selling and administrative \$10 per unit
 Fixed selling and administrative \$5,000,000

Production and sales data:

Units produced, 2013 100,000 units
 Units sold, 2013 80,000 units

Sales price per unit \$500 per unit

$$\begin{array}{r} \Delta = 20,000 \\ \times 10 \\ \hline 200,000 \end{array}$$

Required:

1. Prepare an income statement for the company for 2013 under absorption costing.
2. Prepare an income statement for the company for 2013 under variable costing.

Absorption

Sales	80,000 × 500 = 40,000,000
- COGS	① 80,000 × 95 = 7,600,000
GP	32,400,000
- Op Exp	V selling/Adm (#80,000 × 10) 800,000 Fixed 5,000,000
NI	26,600,000

VC

Sales	40,000,000
- VC	prod (50+25+10) × 80,000 6,800,000 Non prod 800,000
CM	32,400,000
- FC	prod (1M) 1,000,000 nonprod 5,000,000
NI	26,400,000

① DM + DL + All FOH
 50 + 25 + 10 + 10 = 95

Δ = 200,000

Additional Problems for extra practice

(Not Dist. in class)

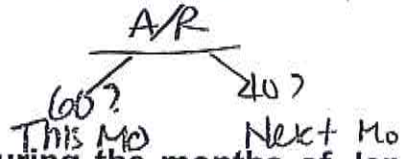
Chapter 20 Alternate Demonstration Problem #1

ABC Company started business on January 1, 2013. The company estimated that sales for the first six months would be as follows:

Month	Units	Dollars
January	10,000	\$ 50,000
February	8,000	40,000
March	15,000	75,000
→ April	17,000	85,000

The company sells all items on account and expects collections of accounts receivable to be as follows: 60% in the month of the sale, and the remaining 40% in the month after the sale.

Required:



- Compute the expected cash collections during the months of January, February, March,.
- The company has decided that finished goods inventory at the end of each month should ideally be equal to 40% of next month's sales. What should budgeted production be for each of the first ~~four~~ ^{three} months?
- It takes two pounds of raw material to make one unit of finished product. The company wants to keep an ending inventory of raw material equal to 30% of next month's production needs. How many pounds of raw material should be purchased in each of the first three months? The raw material costs \$2 per pound. Prepare a raw materials purchases budget for January and February.

		J	F	M					
(a)					(b)				
						J	F	M	
						Sales	10,000	8,000	15,000
						+ end INV	3,200	6,000	6,800
						- beg INV	-0	3,200	6,000
							13,200	10,800	
									18,800

J (\$50,000)	30,000 (60%)		20,000 (40%)		
F (\$40,000)	X	24,000 (60%)		16,000 (40%)	
M (\$75,000)	X		X	45,000 (60%)	

Chapter 21

XYZ Company manufactures tables. A standard cost card for the manufacture of one table shows the following:

Standard Cost per Table:

Direct material: 4 sq. ft. @ \$3/sq. ft.	\$12
Direct labor: 2 hours @ \$8/hr	<u>16</u>
Total prime costs	<u>\$28</u>

In November, the company produced 1,000 tables. Actual production took 2,300 direct labor hours and 3,900 square feet of lumber. The lumber cost \$12,090 while the workers' average pay was \$7.80 per hour.

Required:

Calculate the price and quantity variances for direct material and direct labor.

#1000 tables

Qty
SAS

(S-A)
Qty

- Std
price

#1000x4
4000-3900
100 ft F x 3
300 F

DM

Price
SAA

(S-A)
price

x A
Qty

3-310 U x A
(12090 ÷ 3900)

= .10 x 3900
= 390 U

90 U

(S-A)
Time

x S
Rate

#1000x2=2000-2300 U
300L x 8

DL

(S-A)
Rate

x A
Time

8-780 x 2300
.20F x 2300