
CAPITULO 13
CAPITAL DE TRABAJO Y ADMINISTRACIÓN DE ACTIVOS CIRCULANTES
EJERCICIOS Y PROBLEMAS DE REPASO

Ejercicios

1. A firm has an average age of inventory of 90 days, an average collection period of 40 days, and an average payment period of 30 days. The firm's operating cycle is _____ days.
- (a) 110
 - (b) 130
 - (c) 120
 - (d) 70

Level of Difficulty: 2

Learning Goal: 2

Topic: Operating Cycle (Equation 13.1)

2. A firm has an operating cycle of 120 days, an average collection period of 40 days, and an average payment period of 30 days. The firm's average age of inventory is _____ days.
- (a) 80
 - (b) 50
 - (c) 90
 - (d) 70

Level of Difficulty: 2

Learning Goal: 2

Topic: Average Age of Inventory (Equation 13.1)

3. A firm has a cash conversion cycle of 80 days, an average collection period of 25 days, and an average age of inventory of 70 days. Its operating cycle is _____ days.
- (a) 95
 - (b) 105
 - (c) 60
 - (d) 130

Level of Difficulty: 2

Learning Goal: 2

Topic: Operating Cycle (Equation 13.1)

4. A firm has an average age of inventory of 60 days, an average collection period of 45 days, and an average payment period of 30 days. The firm's cash conversion cycle is _____ days.
- (a) 15
 - (b) 45
 - (c) 75
 - (d) 135

Level of Difficulty: 2

Learning Goal: 2

Topic: Cash Conversion Cycle (Equation 14.2 and Equation 13.3)

5. A firm has a cash conversion cycle of 120 days, an average collection period of 25 days, and an average payment period of 50 days. The firm's average age of inventory is _____ days.
- (a) 45
 - (b) 95
 - (c) 125
 - (d) 145

Level of Difficulty: 2

Learning Goal: 2

Topic: Average Age of Inventory (Equation 13.2 and Equation 13.3)

6. A firm purchased raw materials on account and paid for them within 30 days. The raw materials were used in manufacturing a finished good sold on account 100 days after the raw materials were purchased. The customer paid for the finished good 60 days later. The firm's cash conversion cycle is _____ days.
- (a) 10
 - (b) 70
 - (c) 130
 - (d) 190

Level of Difficulty: 2

Learning Goal: 2

Topic: Cash Conversion Cycle (Equation 13.2 and Equation 13.3)

7. A firm has an average age of inventory of 101 days, an average collection period of 49 days, and an average payment period of 60 days. The firm's cash conversion cycle is
- (a) 150 days.
 - (b) 90 days.
 - (c) 112 days.
 - (d) 8 days.

Level of Difficulty: 2

Learning Goal: 2

Topic: Cash Conversion Cycle (Equation 13.2 and Equation 13.3)

8. A firm has an average age of inventory of 20 days, an average collection period of 30 days, and an average payment period of 60 days. The firm's cash conversion cycle is _____ days.
- (a) 70
 - (b) 50
 - (c) -10
 - (d) 110

Level of Difficulty: 2

Learning Goal: 2

Topic: Cash Conversion Cycle (Equation 13.2 and Equation 13.3)

9. A firm has an average age of inventory of 60 days, an average collection period of 45 days, and an average payment period of 30 days. The firm's operating cycle is _____ days.
- (a) 75
 - (b) 105
 - (c) 90
 - (d) 135

Level of Difficulty: 2

Learning Goal: 2

Topic: Operating Cycle (Equation 13.1)

10. A firm has an operating cycle of 170 days, an average payment period of 50 days, and an average age of inventory of 145 days. The firm's average collection period is _____ days.
- (a) 25
 - (b) 75
 - (c) 95
 - (d) 120

Level of Difficulty: 2

Learning Goal: 2

Topic: Average Collection Period (Equation 13.2 and Equation 13.3)

11. A firm has a cash conversion cycle of 60 days and average collection period of 40 days. The firm's operating cycle is _____ days.
- (a) 20
 - (b) 100
 - (c) 50
 - (d) Cannot be determined

Level of Difficulty: 2

Learning Goal: 2

Topic: Operating Cycle (Equation 13.1, Equation 13.2, and Equation 13.3)

12. A firm has an average age of inventory of 101 days, an average collection period of 49 days, and an average payment period of 60 days. The firm's inventory turnover is _____.
- (a) 3.2
 - (b) 4.0
 - (c) 2.5
 - (d) 3.6

Level of Difficulty: 2

Learning Goal: 2

Topic: Inventory Turnover (Equation 13.2 and Equation 13.3)

Irish Air Services has determined several factors relative to its asset and financing mix.

- (a) The firm earns 10 percent annually on its current assets.
- (b) The firm earns 20 percent annually on its fixed assets.
- (c) The firm pays 13 percent annually on current liabilities.
- (d) The firm pays 17 percent annually on long-term funds.
- (e) The firm's monthly current, fixed and total asset requirements for the previous year are summarized in the table below:

Table 13.1

Month	Current Assets	Fixed Assets	Total Assets
January	\$45,000	\$100,000	\$145,000
February	40,000	100,000	140,000
March	50,000	100,000	150,000
April	55,000	100,000	155,000
May	60,000	100,000	160,000
June	75,000	100,000	175,000
July	75,000	100,000	175,000
August	75,000	100,000	175,000
September	60,000	100,000	160,000
October	55,000	100,000	155,000
November	50,000	100,000	150,000
December	50,000	100,000	150,000

13. The firm's monthly average permanent funds requirement is (See Table 13.1)
 - (a) \$100,000.
 - (b) \$57,500.
 - (c) \$140,000.
 - (d) \$157,500.

Level of Difficulty: 3

Learning Goal: 2

Topic: Permanent Funding Requirements

14. The firm's monthly average seasonal funds requirement is (See Table 13.1)
- (a) \$17,500.
 - (b) \$57,500.
 - (c) \$40,000.
 - (d) \$157,500.

Level of Difficulty: 3

Learning Goal: 2

Topic: Seasonal Funding Requirements

15. The firm's annual financing costs of the aggressive financing strategy are (See Table 13.1)
- (a) \$21,175.
 - (b) \$26,075.
 - (c) \$24,475.
 - (d) \$22,775.

Level of Difficulty: 3

Learning Goal: 2

Topic: Aggressive Financing Strategy

16. The firm's annual financing costs of conservative financing strategy are (See Table 13.1)
- (a) \$22,775.
 - (b) \$26,075.
 - (c) \$29,750.
 - (d) \$21,175.

Level of Difficulty: 3

Learning Goal: 2

Topic: Conservative Financing Strategy

17. The firm's annual profits on total assets for the previous year were (See Table 13.1)
- (a) \$20,000.
 - (b) \$21,500.
 - (c) \$23,625.
 - (d) \$25,750.

Level of Difficulty: 3

Learning Goal: 2

Topic: Profits on Total Assets

18. If the firm's current liabilities in December were \$40,000, the net working capital was (See Table 14.1)
- (a) \$140,000.
 - (b) \$60,000.
 - (c) \$10,000.
 - (d) -\$10,000.

Level of Difficulty: 3
 Learning Goal: 2
 Topic: Net Working Capital

Table 13.2

Flum Packages, Inc.			
Assets		Liabilities & Equity	
Current assets	\$10,000	Current Liabilities	\$ 5,000
Fixed assets	20,000	Long-term debt	12,000
		Equity	13,000
Total	<u>\$30,000</u>	Total	<u>\$30,000</u>

The company earns 5 percent on current assets and 15 percent on fixed assets. The firm's current liabilities cost 7 percent to maintain and the average annual cost of long-term funds is 20 percent.

19. The firm's initial ratio of current to total asset is _____. (See Table 13.2)
- (a) 1:3
 - (b) 3:1
 - (c) 2:3
 - (d) 3:2

Level of Difficulty: 3
 Learning Goal: 2
 Topic: Ratio of Current to Total Assets

20. The firm's initial net working capital is (See Table 13.2)
- (a) -\$ 5,000.
 - (b) \$13,000.
 - (c) \$ 5,000.
 - (d) \$10,000.

Level of Difficulty: 3
 Learning Goal: 2
 Topic: Net Working Capital

21. The firm's initial annual profits on total assets are (See Table 13.2)
- (a) \$2,500.
 - (b) \$3,500.
 - (c) \$3,000.
 - (d) \$4,500.

Level of Difficulty: 3

Learning Goal: 2

Topic: Profits on Total Assets

22. A firm has annual operating outlays of \$1,800,000 and a cash conversion cycle of 60 days. If the firm currently pays 12 percent for negotiated financing and reduces its cash conversion cycle to 50 days, the annual savings is
- (a) \$50,000
 - (b) \$200,000
 - (c) \$ 6,000.
 - (d) \$216,000.

Level of Difficulty: 3

Learning Goal: 2

Topic: Managing the Cash Conversion Cycle (Equation 13.2 and Equation 13.3)

23. A firm has a cash conversion cycle of 60 days. Annual outlays are \$12 million and the cost of negotiated financing is 12 percent. If the firm reduces its average age of inventory by 10 days, the annual savings is _____.
- (a) \$104,000
 - (b) \$144,000
 - (c) \$ 28,800
 - (d) \$40,000

Level of Difficulty: 3

Learning Goal: 2

Topic: Managing the Cash Conversion Cycle (Equation 13.2 and Equation 13.3)

24. The Steel Works, Inc. is required to carry a minimum of 40 days' raw steel, which is 250 tons. It takes 15 days between order and delivery. At what level of steel would Steel Works reorder?
- (a) 3,750 tons
 - (b) 600 tons
 - (c) 667 tons
 - (d) 344 tons

Level of Difficulty: 3

Learning Goal: 3

Topic: Inventory Reorder Point (Equation 13.8)

25. The General Chemical Company uses 150,000 gallons of hydrochloric acid per month. The cost of carrying the chemical in inventory is 50 cents per gallon per year, and the cost of ordering the chemical is \$150 per order. The firm uses the chemical at a constant rate throughout the year. It takes 18 days to receive an order once it is placed. The reorder point is
- (a) 7,500 gallons.
 - (b) 25,000 gallons.
 - (c) 90,000 gallons.
 - (d) 105,000 gallons.

Level of Difficulty: 3

Learning Goal: 3

Topic: Inventory Reorder Point (Equation 13.8)

26. The General Chemical Company uses 150,000 gallons of hydrochloric acid per month. The cost of carrying the chemical in inventory is 50 cents per gallon per year, and the cost of ordering the chemical is \$150 per order. The firm uses the chemical at a constant rate throughout the year. The chemical's economic order quantity is
- (a) 32,863 gallons.
 - (b) 11,619 gallons.
 - (c) 9,487 gallons.
 - (d) 1,900 gallons.

Level of Difficulty: 4

Learning Goal: 3

Topic: EOQ Inventory Model (Equation 13.7)

27. A firm is analyzing a relaxation of credit standards that is expected to increase sales 10 percent. The firm is currently selling 400 units at an average sale price per unit of \$575, and the variable cost per unit is \$400 at the current sales volume. The average cost per unit is \$425. What is the additional profit contribution from sales if credit standards are relaxed?
- (a) \$23,000
 - (b) \$16,000
 - (c) \$6,000
 - (d) \$7,000

Level of Difficulty: 3

Learning Goal: 4

Topic: Relaxing Credit Standards

Table 13.4

Caren's Canoes is considering relaxing its credit standards to encourage more sales. As a result, sales are expected to increase 15 percent from 300 canoes per year to 345 canoes per year. The average collection period is expected to increase to 40 days from 30 days and bad debts are expected to double the current 1 percent level. The price per canoe is \$850, the variable cost per canoe is \$650 and the average cost per unit at the 300 unit level is \$700. The firm's required return on investment is 20 percent.

28. What is the firm's additional profit contribution from sales under the proposed relaxation of credit standards? (See Table 13.4.)
- (a) \$2,250
 - (b) \$6,750
 - (c) \$9,000
 - (d) \$69,000

Level of Difficulty: 4

Learning Goal: 4

Topic: Profit Contribution from Sales

29. What is the cost of marginal investments in accounts receivable under the proposed plan? (See Table 14.4)
- (a) \$1,817
 - (b) \$1,867
 - (c) \$1,733
 - (d) \$1,617

Level of Difficulty: 4

Learning Goal: 4

Topic: Cost of Marginal Investment in Accounts Receivable (Equation 13.9)

30. What is the cost of marginal bad debts under the proposed plan? (See Table 13.4)
- (a) \$383
 - (b) \$765
 - (c) \$3,315
 - (d) \$5,100

Level of Difficulty: 4

Learning Goal: 4

Topic: Cost of Marginal Bad Debts

31. What is the net result of implementing the proposed plan? (See Table 13.4)
- (a) +\$3,952
 - (b) -\$3,868
 - (c) +\$2,083
 - (d) -\$2,083

Level of Difficulty: 4

Learning Goal: 4

Topic: Net Benefit (Cost) of Relaxing Credit Standards

32. A firm is considering relaxing credit standards, which will result in annual sales increasing from \$1.5 million to \$1.75 million, the cost of annual sales increasing from \$1,000,000 to \$1,125,000, and the average collection period increasing from 40 to 55 days. The bad debt loss is expected to increase from 1 percent of sales to 1.5 percent of sales. The firm's required return on investments is 20 percent. The firm's cost of marginal investment in accounts receivable is
- (a) \$5,556.
 - (b) \$9,943.
 - (c) \$12,153.
 - (d) \$152,778.

Level of Difficulty: 4

Learning Goal: 4

Topic: Cost of Marginal Investment in Accounts Receivable (Equation 13.9)

33. A firm is considering relaxing credit standards which will result in an increase in annual sales from \$3 million to \$3.75 million, a decrease in the cost of annual sales from \$2,225,000 to \$2,000,000, an increase in additional profit contribution from sales of \$10,000, and an increase in the average collection period of 15 days, from 20 to 35 days. The bad debt loss is expected to increase from 1 percent to 1.5 percent of sales. The firm's required return on investments is 15 percent. The net result of the firm relaxing its credit standards is
- \$10,000.
 - \$16,250.
 - \$26,875.
 - \$16,875.

Level of Difficulty: 4

Learning Goal: 4

Topic: Net Benefit (Cost) of Relaxing Credit Standards

A breakdown of Teffan, Inc.'s outstanding accounts receivable dated June 30, 2003 on the basis of the month in which the credit sale was initially made follows. The firm extends 30-day credit terms.

Table 13.5

Month of Credit Sale	Accounts Receivable
June, 2003	\$ 410,000
May, 2003	340,000
April, 2003	270,000
March, 2003	200,000
February, 2003 or before	100,000
Total	\$1,320,000

34. Accounts receivable over 90 days total (See Table 13.5)
- \$200,000.
 - \$470,000.
 - \$300,000.
 - \$100,000.

Level of Difficulty: 3

Learning Goal: 5

Topic: Aging of Accounts Receivable

35. What is the firm's marginal profit contribution from sales under the proposed plan of initiating the cash discount? (See Table 13.6)
- (a) \$22,500
 - (b) \$40,000
 - (c) \$62,500
 - (d) \$100,000

Level of Difficulty: 4

Learning Goal: 5

Topic: Profit Contribution from Sales

Table 13.6

Dizzy Animators, Inc. currently makes all sales on credit and offers no cash discount. The firm is considering a 3 percent cash discount for payment within 10 days. The firm's current average collection period is 90 days, sales are 400 films per year, selling price is \$25,000 per film, variable cost per film is \$18,750 per film, and the average cost per film is \$21,000. The firm expects that the change in credit terms will result in a minor increase in sales of 10 films per year, that 75 percent of the sales will take the discount, and the average collection period will drop to 30 days. The firm's bad debt expense is expected to become negligible under the proposed plan. The bad debt expense is currently 0.5 percent of sales. The firm's required return on equal-risk investments is 20 percent.

36. What is the marginal investment in accounts receivable under the proposed plan? (See Table 13.6)
- (a) \$1,234,375
 - (b) \$1,382,500
 - (c) \$1,567,300
 - (d) \$1,841,570

Level of Difficulty: 4

Learning Goal: 5

Topic: Marginal Investment in Accounts Receivable (Equation 13.9)

37. What is the cost of marginal investment in accounts receivable under the proposed plan? (See Table 13.6)
- (a) \$313,460
 - (b) \$276,500
 - (c) \$246,875
 - (d) \$368,314

Level of Difficulty: 4

Learning Goal: 5

Topic: Cost of Marginal Investment in Accounts Receivable (Equation 13.9)

38. What are the savings of marginal bad debts under the proposed plan? (See Table 13.6)
- (a) \$500,000
 - (b) \$50,000
 - (c) \$10,000
 - (d) \$5,000

Level of Difficulty: 4

Learning Goal: 5

Topic: Cost of Marginal Bad Debts

39. What is the cost of the marginal cash discount? (See Table 13.6)
- (a) \$768,750
 - (b) \$300,000
 - (c) \$307,500
 - (d) \$230,625

Level of Difficulty: 4

Learning Goal: 5

Topic: Cost of Marginal Cash Discount

40. What is the net result of increasing the cash discount? (See Table 13.6)
- (a) +\$33,750
 - (b) -\$33,750
 - (c) +\$128,750
 - (d) -\$58,750

Level of Difficulty: 4

Learning Goal: 5

Topic: Net Benefit (Cost) of Increasing the Cash Discount

Problemas

1. Minny Fishing Products is analyzing the performance of its cash management. On the average, the firm holds inventory 65 days, pays its suppliers in 35 days, and collects its receivables in 15 days. The firm has a current annual outlay of \$1,960,000 on operating cycle investments. Minny currently pays 10 percent for its negotiated financing. (Assume a 360 day year.)
- (a) Calculate the firm's cash conversion cycle.
 - (b) Calculate the firm's operating cycle.
 - (c) Calculate the daily expenditure and the firm's annual savings if the operating cycle is reduced by 15 days.

Level of Difficulty: 3

Learning Goal: 2

Topic: Managing the Operating and Cash Conversion Cycles (Equation 13.1, Equation 13.2, and Equation 13.3)

2. A firm has arranged for a lockbox system to reduce collection time of accounts receivable. Currently the firm has an average collection period of 43 days, an average age of inventory of 50 days, and an average payment period of 10 days. The lockbox system will reduce the average collection period by three days by reducing processing, mail, and clearing float. The firm has total annual outlays of \$15,000,000 and currently pays 9 percent for its negotiated financing.
- (a) Calculate the cash conversion cycle before and after the lockbox system.
 - (b) Calculate the savings in financing costs from the lockbox system.

Level of Difficulty: 3

Learning Goal: 2

Topic: Lockbox System and the Cash Conversion Cycle (Equation 13.2 and Equation 13.3)

3. Ligure Jewelers has seasonal financing needs that vary from \$250,000 to \$2,725,000. The permanent financing requirement is \$4,100,000. Check the appropriate box indicating the better strategy for each of the following events.

Event	Aggressive Financing Strategy	Conservative Financing Strategy
1. Due to high inflation, short-term interest rates are much higher than long-term rates.	—	—
2. Sales revenue is unpredictable.	—	—
3. The firm has a large proportion of its assets in fixed assets.	—	—
4. The average seasonal financing need is \$1,000,000.	—	—
5. The average seasonal financing need is \$2,000,000.	—	—

Level of Difficulty: 3

Learning Goal: 2

Topic: Aggressive versus Conservative Financing Strategy

4. Ace Business Forms has compiled several factors relative to its financing mix. The firm pays 8 percent on short-term funds and 10 percent on long-term funds. The firm's monthly current, fixed and total asset requirements for the previous year are summarized in Table 13.7.

Determine:

- the monthly average permanent funds requirement
- the monthly average seasonal funds requirement
- the annual financing costs (aggressive strategy)
- the annual financing costs (conservative strategy)

Level of Difficulty: 4

Learning Goal: 2

Topic: Aggressive versus Conservative Financing Strategy

5. Ace Business Forms pays 8 percent on short-term funds and 10 percent on long-term funds. Determine its annual financing costs using the trade-off strategy described: Ace Business Forms has seasonal financing requirements ranging from zero to \$50,000 per month. Based on this range, the firm has decided to finance \$25,000 per month of the seasonal funds with long-term debt and the rest of the seasonal funds with short-term debt. The permanent funds requirement will be financed with long-term funds. (See Table 13.7)

Level of Difficulty: 4

Learning Goal: 2

Topic: Trade-off Financing Strategy

6. Studio One, a dealer in contemporary art, has forecasted its seasonal financing needs for the next six months as follows:

Month	Seasonal Requirement
January	\$1,450,000
February	1,895,000
March	2,000,000
April	1,575,000
May	1,342,000
June	1,562,000

- The firm projects short-term funds will cost 11 percent and long-term funds will cost 13 percent annually.
- The firm's permanent funds requirement is \$500,000.

Calculate financing costs for the first six months using the aggressive and conservative strategies.

Level of Difficulty: 4

Learning Goal: 2

Topic: Aggressive versus Conservative Financing Strategy

7. Tim's Sons Company is interested in making sure they have enough money to finance their assets. The company's current assets and fixed assets for the months of January through December are given in the following table.

Month	Current Assets	Fixed Assets	Total Assets
January	\$60,000	\$70,000	\$130,000
February	58,000	70,000	128,000
March	55,000	70,000	125,000
April	47,000	70,000	117,000
May	40,000	70,000	110,000
June	41,000	70,000	111,000
July	40,000	70,000	110,000
August	37,000	70,000	107,000
September	38,000	70,000	108,000
October	33,000	70,000	103,000
November	40,000	70,000	110,000
December	50,000	70,000	120,000

- (a) Find the average monthly seasonal and permanent funds requirement.
- (b) What is the total cost of financing under the aggressive and conservative strategies. Assume short-term funds costs 4.5 percent and the interest rate for long-term funds is 12 percent.
- (c) Find the net working capital under the aggressive and conservative strategies.

Level of Difficulty: 4

Learning Goal: 2

Topic: Aggressive versus Conservative Financing Strategy

8. Sansatrip Products has ten different items in its finished goods inventory. The average number of units held in inventory and the average unit cost are listed for each item. The firm uses an ABC system of inventory control.

Item	Average Number of Units in Inventory	Average Cost Per Unit
1	3,000	\$1.50
2	500	10.00
3	4,000	12.00
4	50	40.00
5	10,000	5.00
6	340	15.00
7	1,500	3.00
8	460	30.00
9	2,500	25.00
10	390	4.10

- (a) Which items should be considered to be in the A category of an ABC system of inventory?
 (b) Which items should be considered to be in the B category of an ABC system of inventory?

Level of Difficulty: 3

Learning Goal: 3

Topic: ABC Inventory Management System

9. Contex, Inc. uses 800 units of a product per year on a continuous basis. The product has carrying costs of \$50 per unit per year and order costs of \$300 per order. It takes 30 days to receive a shipment after an order is placed and the firm requires a safety stock of 5 days usage in inventory.
- (a) Calculate the economic order quantity (EOQ).
 (b) Determine the reorder point.

Level of Difficulty: 3

Learning Goal: 3

Topic: EOQ Inventory Model and Inventory Reorder Point (Equation 13.7 and Equation 13.8)

10. Sharon's Apple Farm uses 12,600 baskets a year for apple shipment. Determine the optimum order quantity of baskets assuming the order costs per order is \$600 and it costs \$2 to carry a unit of basket in inventory per period.

Level of Difficulty: 3

Learning Goal: 3

Topic: EOQ Inventory Model (Equation 13.7)

11. Sharon uses 35 baskets each day to pack apples for shipping. It takes 5 days to receive a shipment of baskets after an order is placed and she would like a safety stock of 3 days in inventory. At what level of inventory should Sharon place an order for baskets?

Level of Difficulty: 3

Learning Goal: 3

Topic: Inventory Reorder Point (Equation 13.8)

12. Data products, Inc., uses 2,400 units of a product per year on a continuous basis. The product carrying costs are \$60 per year and ordering costs are \$250 per order. It takes 20 days to receive a shipment after an order is placed and the firm requires a safety stock of 8 days of usage in inventory.

(a) Calculate the economic order quantity (round up to the nearest whole unit).

(b) Calculate the total cost per year to order and carry this item.

(c) Their supplier has notified the company that if they increase their order quantity by 58 units they will give the company a discount. Calculate the dollar discount that the company will have to give Dataproducts to result in a net benefit to the company.

Level of Difficulty: 4

Learning Goal: 3

Topic: EOQ Inventory Model and Safety Stock (Equation 13.7)

13. Nellie's Finery

Credit Scoring Policy

Financial and Credit Characteristics	Predetermined Weight
Credit references	0.25
Education	0.05
Home ownership	0.15
Income range	0.30
Payment history	0.15
Years on job	0.10

Financial and Credit Characteristics	Applicant A	Applicant B
Credit references	90	70
Education	80	95
Home ownership	70	50
Income range	50	95
Payment history	75	70
Years on job	80	70

Nellie's Finery uses the credit scoring technique to evaluate retail applications. The financial and credit characteristics considered and weights indicating their relative importance in the credit decision are shown above. The firm's credit standards are to accept all applicants with credit scores of 85 or more, to extend limited credit to applicants with scores ranging from 75 to 84, and to reject all applicants below 75. The firm is currently processing two applicants. The scores of each applicant on each of the financial and credit characteristics are summarized above. Would you recommend either of these applicants for credit extension?

Level of Difficulty: 3

Learning Goal: 4

Topic: Managing Credit Standards

14. Krug Gold Coin, Inc. is considering shortening its credit period from 30 days to 20 days and believes, as a result of this change, its average collection period will decrease from 36 days to 30 days. Bad debt expenses are also expected to decrease from 1.2 percent to 0.8 percent of sales. The firm is currently selling 300,000 units but believes as a result of the change, sales will decline to 275,000 units. On 300,000 units, sales revenue is \$4,200,000, variable costs total \$3,300,000, and fixed costs are \$300,000. The firm has a required return on similar-risk investments of 15 percent. Evaluate this proposed change and make a recommendation to the firm.

Level of Difficulty: 4

Learning Goal: 4

Topic: Managing Credit Standards

15. Brunswick Ad Agency's accounts receivable totaled \$451,000 on January 30, 2003. An aging summary of receivables at this date follows:

End of Month	Amount
January, 2003	\$250,000
December, 2002	100,000
November, 2002	50,000
October, 2002	30,000
September, 2002 before	21,000
Total	\$451,000

The firm extends 30-day credit terms to all its credit customers.

- (a) Prepare an aging schedule for Brunswick Ad Agency.
 (b) Evaluate the firm's collection performance.

Level of Difficulty: 3

Learning Goal: 5

Topic: Accounts Receivable Aging Schedule

16. Landrum Distributing, Inc. has completed an analysis of check-clearing times of five key suppliers. On a weekly basis, the firm has a \$50,000 check disbursed to each of these suppliers, totaling \$250,000. In examining the check-clearing times of each supplier, the firm revealed:

Number of Business Days for Check to Clear	Supplier
3	1
5	2
6	3
7	4
8	5

Given this information, what recommendation would you give the firm with respect to paying its suppliers weekly? Explain.

Level of Difficulty: 3

Learning Goal: 6

Topic: Managing the Float

17. Don's Sons Company has been offered by its bank to manage its cash at a cost of \$35,000 per year. Under the proposed cash management, the firm can reduce the cash required on hand by \$180,000. Since the bank is also doing a lot of record keeping, the firm's administrative cost would decrease by \$2,000 per month. What recommendation would you give the firm with respect to the proposed cash management assuming the firm's opportunity cost is 12 percent?

Level of Difficulty: 3

Learning Goal: 6

Topic: Outsourcing Cash Management Activities

18. Match each marketable security with its description.

- (a) Eurodollar deposit
 - (b) Banker's acceptance
 - (c) Federal agency issue
 - (d) Commercial paper
 - (e) Repurchase agreement
 - (f) Treasury bill
 - (g) Money market mutual fund
 - (h) Negotiable certificate of deposit
 - (i) Treasury note
1. _____ A short term, unsecured promissory note issued by a corporation.
 2. _____ An obligation of the U.S. Treasury with common maturities of 91 to 182 days.
 3. _____ A portfolio of marketable securities.
 4. _____ An arrangement whereby a bank or securities dealer sells specific marketable securities to a firm and agrees to purchase them in the future.
 5. _____ An obligation of the U.S. Treasury with mutual maturities of between one and seven years.
 6. _____ Negotiable instrument evidencing the deposit of a certain number of dollars in a commercial bank.
 7. _____ An instrument issued by the Federal National Mortgage Association.
 8. _____ Funds deposited in banks located outside the U.S. and denominated in U.S. dollars.
 9. _____ Short term credit arrangement used by businesses to finance transactions with foreign countries or firms with unknown credit capacities.

Level of Difficulty: 3

Learning Goal: 6

Topic: Marketable Securities