F96P3.1 Extracting numbers & ratios from reports

Using the annual report provided, find or compute the following:

a. Receipts from sales to customers?
b. Payments to the IRS?
c. Inventory turnover using year-end figures?
d. Return on invested capital in 1993, using year-end figures. Assume a tax rate of 40%.
e. Days receivable in 1993, using year-end figures?
f. Cash provided by operating activities.

2. Given the following indirect cash flow statement, what is:

a. Revenue
b. What was their cost of goods sold in 1991?

F96P3.3 Deferred taxes for Ross Company

On January 2, 1994, Ross Co. purchased a machine for $70,000. This machine has a 5-year useful life, a residual value of $10,000, and is depreciated using the straight-line method for financial statement purposes. For tax purposes, depreciation expense was $25,000 for 1994 and $20,000 for 1995. Ross’ 1994 and 1995 income, before income taxes and depreciation expense, was $100,000 and its tax rate was 30%.

a. What tax expense will Ross show in 1994 and 1995?

This is the tax rate times the reported income before tax for those two years. Ross has income before tax of $100,000 less $12,000 in straight-line depreciation for each of those years. So tax expense is $26,400 for each ($88,000 x 30%).

b. What is Ross’s current tax payable in each of those years?

Current tax payable in 1994 = ($100,000 - 25,000) x 30% = $22,500
Current tax payable in 1995 = ($100,000 -20,000) x 30% = $24,000

c. What would its deferred tax liability be at the end of 1995?

This is the cumulative difference between its tax expense and its current tax liability in 1994. The difference was $3,900 in 1994 and $2,400 in 1995 making a deferred tax liability total of $6,300.
d. Show how this unwinds in the remaining years if the remaining tax depreciation is $15,000.

\[
\text{Tax payable for 1996, 1997 and 1998} = (100,000 - 5,000) \times 30\% = 28,500 \\
\text{Tax expense for those same years} = (100,000 - 12,000) \times 30\% = 26,400 \\
\text{Difference is$2,100 or$6,300 altogether. Note that the tax expense is less than the tax payable in these years creating a debit to tax payable that reverses the credit generated in the first two years.}
\]

**F96P3.5 Deferred tax: permanent vs. temporary differences**
A temporary difference between financial and tax accounting that would lead to a deferred tax liability is

a. Interest revenue on municipal bonds.

b. Accrual of warranty expense.

c. Excess of tax depreciation over financial accounting depreciation.

d. Subscriptions received in advance.

*Answer a is a permanent difference; answers b and d would lead to a deferred tax asset. So b is the answer.*

**F96P3.6 EPS with preferred stock dividends for Fogg Inc.**
In 1993, Fogg, Inc. issued $10 par value common stock for $25 per share. No other common stock transactions occurred until March 31, 1995, when Fogg acquired some of the issued shares for $20 per share and retired them. Which of the following statements correctly states an effect of this acquisition and retirement?

a. 1995 net income is decreased

b. 1995 net income is increased

c. Capital is decreased

d. Retained earnings is decreased

*Treasury stock has no effect on income or retained earnings but it does reduce the capital of a company hence c.*

**F96P3.7 EPS with preferred stock dividends for Gow Corporation**
At December 31, 1995 and 1994, Gow Corp. had 100,000 shares of common stock outstanding and 10,000 shares of 5%, $100 par value cumulative preferred stock outstanding. No dividends were declared on either the preferred or common stock in 1995 or 1994. Net income for 1994 was $1,000,000. What did earnings per common share amount to in 1995?
Preferred dividends must be subtracted but only one year even if it is cumulative preferred and a preferred dividend was missed. Preferred dividend is 5% of $1 million or $50,000.

\[ \text{EPS} = \frac{1,000,000 - 50,000}{10,000} = 9.50 \]

**F96P3.8 EPS with cumulative preferreds**

In determining basic earnings per share, dividends on nonconvertible cumulative preferred stock should be

a. Disregarded
b. Added back to net income whether declared or not.
c. Deducted from net income only if declared.
d. Deducted from net income whether declared or not.

*One always computes available for common whether a dividend is declared or not so d.*

**F96P3.10 EPS with preferred stock for King Syndicates**

King Syndicates shows net income of $120,000. There are 16,000 common shares authorized; 12,000 shares issued; and 8,000 share outstanding.

a. What is their EPS?

\[ \text{EPS} = \frac{\text{Available for common}}{\text{Common shares outstanding}} \]
\[ = \frac{120,000}{8,000} = 15 \text{ per share} \]

b. What is their EPS if they issue $1,000,000 of 4% preferred stock?

\[ \text{EPS} = \frac{(120,000 - 40,000)}{8,000} = 10 \text{ per share} \]

**F96P3.11 EPS with convertible preferreds for Lazaroni, Byrd & Co.**

Lazaroni, Byrd & Co. have issued $1,000,000 of 4% convertible preferred stock. The preferred stock is convertible into 8,000 common shares. Net income is currently standing at $100,000. There are 8,000 common shares outstanding. The tax rate is 30%.

a. What is their basic EPS?

\[ \text{EPS} = \frac{\text{Available for common}}{\text{Shares outstanding}} \]
\[ = \frac{(100,000 - 40,000)}{8,000} = 7.50 \text{ per share} \]

b. What is the fully-diluted EPS?
$100,000/16,000 = $6.25
Note there is no preferred dividend after conversion but twice as many shares.

**F96P3.12 EPS with convertible bonds for Pratt & Overy Inc.**
Pratt & Overy Inc. have $1,000,000 of 4% convertible bonds on their books. These bonds are convertible into 8,000 common shares. Net income is currently standing at $100,000. There are 8,000 common shares outstanding. The tax rate is 30%.

a. What is their basic EPS?

\[
EPS = \frac{\text{Available for common}}{\text{Shares outstanding}} = \frac{100,000}{8,000} = $12.50
\]

b. What is their fully-diluted EPS?

\[
EPS = \frac{(100,000 + 40,000 \times 70%)}{16,000} = $8.00
\]

**F96P3.9 Stock dividends for Burns and Sanders**
Burns & Sanders Inc. show net income of $220,000. Capital at the end of the last year stood at $1.4 million dollars. Retained earnings at the end of last year was $580,000. There is no debt in the firm and no dividends are paid.

a. What is the return on equity for this year using year end figures?

\[
\text{Owners’ equity at the end of the year is } $1.4 \text{ million plus } $580,000 \text{ plus } $220,000 \text{ hence the ROE} = \frac{\text{NI}}{\text{OE}} \text{ is 10 percent.}
\]

b. If the company issues a stock dividend of $60,000 at the end of the year, what will the capital account total after the dividend?

\[
\text{Stock dividends increase capital and decrease retained earnings so capital will rise to } $1.46 \text{ million.}
\]

c. What will the return on equity be after the planned dividends?

\[
\text{This will not change because owners’ equity is not affected by a stock dividend.}
\]

**F96P3.13 Equity investment with Hart & Cosmo**
Hart Company purchased 5,000 shares of the 12,500 common stock shares of Cosmo Corporation on June 1, 1994 at $35 per share. It is now December 31, 1994, end of the accounting period, and the records of Cosmo Corporation reflect the following:
Net income ..................................... $80,000
Dividends declared and paid during December 1994 ........ 12,500
Market price per share of Cosmo Corp. ......................... 33

What would Hart report in their investment account on 12/31/1994, if anything?

a. $165,000
b. $170,000
c. $175,000
d. $202,000
e. $207,000

d  Made up of 175,000 + 32,000 - 5,000 being the opening investment of 5,000 shares at $35 each plus 40% of Cosmo’s net income less 40% of Cosmo’s dividends. We are using the equity method here.

F96P3.14 Consolidations for Company P & S

For the questions that follow use the following facts:

On January 1, 1995, Company P purchased 80 percent of the outstanding shares of Company S in the open market for $72,000 cash. On that date, prior to the acquisition, the separate balance sheets of the two companies were as follows:

<table>
<thead>
<tr>
<th></th>
<th>Company P</th>
<th>Company S</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$ 80,000</td>
<td>$16,000</td>
</tr>
<tr>
<td>Receivable from Company P</td>
<td>4,000</td>
<td></td>
</tr>
<tr>
<td>Fixed assets</td>
<td>80,000</td>
<td>60,000</td>
</tr>
<tr>
<td>Total</td>
<td>$160,000</td>
<td>$80,000</td>
</tr>
<tr>
<td>Liabilities</td>
<td>$ 26,000</td>
<td>$20,000</td>
</tr>
<tr>
<td>Payable to Company S</td>
<td>4,000</td>
<td></td>
</tr>
<tr>
<td>Common stock:</td>
<td>100,000</td>
<td>48,000</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>30,000</td>
<td>12,000</td>
</tr>
<tr>
<td>Total</td>
<td>$160,000</td>
<td>$80,000</td>
</tr>
</tbody>
</table>

It was determined that on the date of acquisition the fair-market value of the fixed assets of Company S was $8,000 in excess of their book value as reflected on the books of Company S.
To answer the questions that follow you will want to do a consolidation in which the key points are that you add assets to assets and liabilities to liabilities; owner’s equity of the consolidated company is the owners’ equity of the parent; the excess over book is then used to adjust specific acquired assets to fair value leaving the balance to be denoted goodwill. That adjustment is depreciated at the same rate as the asset itself; goodwill is amortized over a period not to exceed 40 years in the States and shorter periods in the rest of the world. (We will probably follow them in shortening our amortization period.) Note that we begin by adjusting P for its purchase – cash is credited and investment is debited.

<table>
<thead>
<tr>
<th>Company P</th>
<th>Company S</th>
<th>Consolidated</th>
<th>Adjusted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$ 8,000</td>
<td>$16,000</td>
<td>$24,000</td>
</tr>
<tr>
<td>Receivable from Company P</td>
<td>4,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment</td>
<td>72,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excess over book</td>
<td></td>
<td>12,000</td>
<td></td>
</tr>
<tr>
<td>Goodwill</td>
<td></td>
<td></td>
<td>4,000</td>
</tr>
<tr>
<td>Fixed assets</td>
<td>80,000</td>
<td>60,000</td>
<td>140,000</td>
</tr>
<tr>
<td>Total</td>
<td>$160,000</td>
<td>$80,000</td>
<td>176,000</td>
</tr>
<tr>
<td>Liabilities</td>
<td></td>
<td>$26,000</td>
<td>$20,000</td>
</tr>
<tr>
<td>Payable to Company S</td>
<td></td>
<td>4,000</td>
<td></td>
</tr>
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<td>100,000</td>
<td>48,000</td>
<td>100,000</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>30,000</td>
<td>12,000</td>
<td>30,000</td>
</tr>
<tr>
<td>Total</td>
<td>$160,000</td>
<td>$80,000</td>
<td>176,000</td>
</tr>
</tbody>
</table>

a. How much cash will the consolidated company show?

Answer is now obviously $24,000.

b. What account, if any, is debited by Company P at the date of acquisition?

- a. Cash
- b. Investment account
- c. Common stock
- d. None

The investment account – answer b.

c. What account, if any, is debited by Company S at the date of acquisition?

- a. Cash
- b. Investment account
c. Common stock
  d. None

No entries are made by the acquisition.

d. What goodwill will the consolidated company show in its books?

*Be careful not to confuse goodwill (purchase price over fair value) with excess over book (purchase price over book value). Answer here is $4,000.*

e. At what value will total assets be shown on the consolidated balance sheet?

*As shown above, $176,000. This question merely served as a check that you had the individual items correct.*