ACC 300 · MEETING 21

Acquiring and improving tangible assets

November 12, 2026



What did the company acquire?

Adrenaline Rush operates a theme park. It buys a new amusement park ride and pays to deliver, assemble, and test it.

The park also trains operators and advertises the opening.

All these payments help the business. Which costs belong to the ride?

An asset provides service beyond the current period

Property, plant, and equipment are tangible assets used in operations over more than one period.

The park acquires a ride.	It records the cost as an asset.
The park uses the ride.	It allocates depreciable cost over the periods of use.
The park sells the ride.	It removes the remaining carrying amount.

The ride provides admissions service for many years, so it is equipment.

Recall: Souvenirs held for sale are inventory.

Capitalizing a cost changes when expense is recognized

To **capitalize** a cost means to include it in an asset's recorded amount.

To **expense** a cost means to recognize an expense in the current period.

Costs that become part of an asset

Acquiring the ride and preparing it for use establish its recorded cost. Depreciation allocates its depreciable cost as the park uses it.

Costs recognized as expenses

Advertising promotes the business but does not acquire or prepare the ride, so it is not part of the ride's cost.

Classify what the company acquired separately from how it financed the purchase.

Which costs prepare the asset itself?

Under US generally accepted accounting principles (GAAP), include costs necessary to bring the asset to the **location and condition needed for its intended use**.

Transport the ride.	Freight brings it to the park.
Assemble and test it.	These activities make the ride ready to operate.
Train staff and advertise.	These services prepare the broader business, rather than the ride itself.

A company does not capitalize a cost because of its timing alone. A cost paid before opening can still be an expense.

Source: Accounting Standards Codification (ASC) 360-10-30-1.

Adrenaline Rush prepares a new amusement park ride

The ride is ready July 1, 2026. Its dedicated foundation has no separate use and shares the ride's useful life.

Cost	Amount	Cost	Amount
Invoice price	$4,800,000	Assembly	$280,000
Trade discount	($200,000)	Required testing	$50,000
Freight	$120,000	Operator training	$80,000
Foundation	$450,000	Opening advertising	$120,000

Training and advertising services are fully received during 2026. All amounts are paid in cash.

Build the ride cost from the costs of preparation

Asset cost = Net purchase price + Necessary delivery and preparation costs.

Cost	Amount	Cost	Amount
Invoice price	$4,800,000	Assembly	$280,000
Trade discount	($200,000)	Required testing	$50,000
Freight	$120,000	Operator training	$80,000
Foundation	$450,000	Opening advertising	$120,000

Recorded ride cost: $5,500,000.

Training and advertising total $200,000. These costs prepare the broader business rather than the ride itself.

2026: ACQUIRE THE RIDE AND RECEIVE SERVICES

Ride	$5,500,000	
Training expense	$80,000	
Advertising expense	$120,000	
Cash		$5,700,000

Your turn: determine the MRI scanner cost

> Take about 3 minutes to work through this problem on your own or with your neighbor.

Healing Hands Hospital is an investor-owned, **for-profit** hospital. Its magnetic resonance imaging (MRI) scanner is ready October 1, 2026. All listed amounts are paid in cash.

Item	Amount	Item	Amount
Invoice price	$900,000	Required testing	$10,000
Trade discount	($30,000)	Staff training received	$18,000
Delivery	$15,000	Maintenance paid for 2027	$24,000
Installation	$75,000		

Decide how to account for each listed cost, then prepare the journal entry.

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Healing Hands Hospital's MRI scanner is ready October 1, 2026. What is the initial equipment cost?

Net price $870,000; delivery $15,000; installation $75,000; required testing $10,000; 2026 staff training $18,000; 2027 maintenance $24,000.

A $988,000

B $970,000

C $994,000

D $1,012,000

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Correct answer: B

Healing Hands Hospital's MRI scanner is ready October 1, 2026. What is the initial equipment cost?
Net price $870,000; delivery $15,000; installation $75,000; required testing $10,000; 2026 staff training $18,000; 2027 maintenance $24,000.

A **$988,000**
This choice adds $18,000 of staff training to $970,000. Training is a consumed service.

B **$970,000**
B is correct. Net price, delivery, installation, and required testing prepare the scanner for use. Together they total $970,000.

C **$994,000**
This choice adds $24,000 of 2027 maintenance to $970,000. Future maintenance is a separate prepaid asset.

D **$1,012,000**
This choice adds both training and maintenance to $970,000. It treats every payment as equipment cost.

The hospital acquired equipment and a future service

Healing Hands Hospital's MRI scanner is ready October 1, 2026. All listed amounts are paid in cash.

Item	Amount
Invoice price	$900,000
Trade discount	($30,000)
Delivery	$15,000
Installation	$75,000
Required testing	$10,000
Staff training received in 2026	$18,000
Maintenance for 2027	$24,000

Scanner cost = Net price + Delivery + Installation + Required testing.

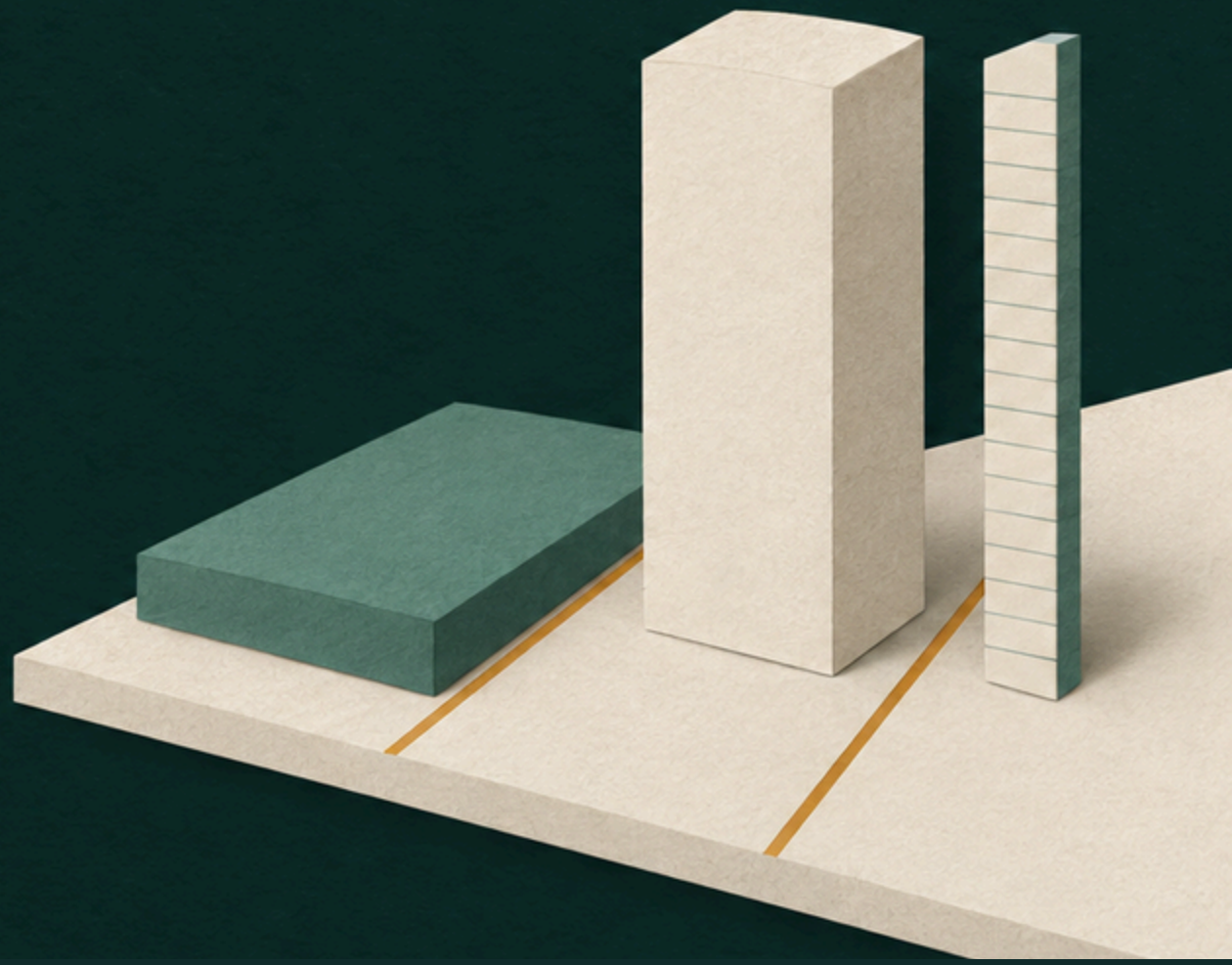
2026: ACQUIRE THE SCANNER AND RELATED SERVICES

MRI equipment	$970,000	
Training expense	$18,000	
Prepaid service	$24,000	
Cash		$1,012,000

Training is a service consumed in 2026. Maintenance remains prepaid until the hospital receives the service in 2027.

PROPERTY

Land, buildings, and shared purchase prices



Separate assets with different service lives

Land

Land generally has an indefinite useful life, so it is not depreciated.

Buildings

Structures have finite service lives and are depreciated when ready for use.

Land improvements

Paving, fences, and lighting wear out. Depreciate them separately from land.

Classification affects later expense even when the assets occupy the same property.

Compare two demolition scenarios

Bought for the land

At purchase, the company plans to demolish the existing building so it can use the land.

The company removes the building before using it.

Land preparation: Add demolition cost to land cost and subtract proceeds from selling recovered materials.

Used, then retired

The company buys land and a building, records them separately, and uses the building in its operations.

Years later, the company decides to demolish it.

Asset retirement: Remove the building's remaining recorded cost. The land remains on the books at its recorded cost.

One purchase price must be divided among the assets

A company may negotiate one price for land, a building, and other assets. Each asset needs its own recorded cost because the company will account for its use and retirement separately.

Appraisals supply **relative fair values**: each asset’s share of the combined fair value. Apply those shares to the total acquisition cost.

The appraisals divide the cost paid; they do not replace it with a new total.

Source: ASC 805-50-30-3.

A single price buys several assets

In 2026, Adrenaline Rush buys land, an empty administration building, and an existing paved parking area. The purchased set is not a business, so the park allocates cost by relative fair value and records no goodwill.

Purchase price: $2,400,000. Direct legal costs: $40,000.

Asset	Appraised fair value
Land	$1,500,000
Building	$1,000,000
Parking area	$500,000
Total	**$3,000,000**

The park uses the appraisals only for relative values. It allocates the actual cost paid, including direct legal costs.

Use relative fair values to allocate total cost

Total cost = Purchase price + Direct acquisition costs = $2,440,000.

$$\text{Allocated asset cost} = \text{Total acquisition cost} \times \frac{\text{Asset fair value}}{\text{Total fair value}}.$$

Asset	Share of combined fair value	Allocated cost
Land	$\frac{\$1{,}500{,}000}{\$3{,}000{,}000} = 50\%$	$1,220,000
Building	$\frac{\$1{,}000{,}000}{\$3{,}000{,}000} = 33.33\%$	$813,333.33
Parking area	$\frac{\$500{,}000}{\$3{,}000{,}000} = 16.67\%$	$406,666.67

Multiply each unrounded share by $2,440,000. Total recorded cost remains $2,440,000.

Source: ASC 805-50-30-3.

Record each asset at its allocated cost

Adrenaline Rush · Property purchase continued: total cost $2,440,000, allocated by relative fair value.

2026: PURCHASE LAND, A BUILDING, AND A PARKING AREA

Land	$1,220,000	
Building	$813,333.33	
Land improvements	$406,666.67	
Cash		$2,440,000

The parking area is a land improvement. The park depreciates the building and the parking area. It does not depreciate the land.

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The purchase price and legal fees stay fixed. A corrected appraisal increases only the land's fair value. What happens to allocated costs?

A Land rises; building and parking stay unchanged.

B Every allocated cost rises.

C Total recorded cost rises to the new appraisal total.

D Land rises; building and parking fall.

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Correct answer: D

The purchase price and legal fees stay fixed. A corrected appraisal increases only the land's fair value. What happens to allocated costs?

A **Land rises; building and parking stay unchanged.**
The fixed total must still be allocated across every asset.

B **Every allocated cost rises.**
The company has not incurred any additional acquisition cost.

C **Total recorded cost rises to the new appraisal total.**
The company uses appraisals only for proportions. Total recorded cost stays at the actual cost paid.

D **Land rises; building and parking fall.**
D is correct. Land receives a larger share of the same total. The other assets receive smaller shares.

FINANCING

Acquiring assets without immediate cash payment



A future payment includes a financing cost

The asset's price and the cost of waiting to pay are different amounts.

Recall from the time-value lecture that we discount a future payment to measure its value today.

Use a reliable cash price when available. Otherwise, estimate present value using an appropriate market rate.

An unstated interest rate does not make financing free.

Source: ASC 835-30-25-2, 25-10 through 25-12, and 35-2.

Separate ultrasound cost from future interest

On January 1, 2026, Healing Hands acquires ultrasound equipment for a note. It will pay $242,000 on December 31, 2027.

There are no interim payments or stated interest. No reliable cash price is available. The market rate is 10% annually.

n = Number of years until payment.

$$\text{Present value} = \frac{\text{Future payment}}{(1 + \text{Annual rate})^{n}}$$

$$\text{Equipment cost} = \frac{\$242{,}000}{(1 + 10\%)^{2}} = \$200{,}000$$

Note discount = Face amount – Present value = $42,000.

Record the note at face amount less a discount

JANUARY 1, 2026: ACQUIRE ULTRASOUND EQUIPMENT

Ultrasound equipment	$200,000	
Discount on notes payable	$42,000	
Notes payable		$242,000

The hospital recognizes the discount as interest over the borrowing period.

An asset can be acquired without paying cash

A company still records an asset when it gives ownership shares in exchange or receives the asset as a gift.

Shares issued

The company measures the exchange using the fair value of the asset or the shares, whichever is more clearly evident. The credit records an owner investment in equity.

Unconditional gift from a nonowner

The company records the asset at fair value and recognizes contribution revenue. The donor receives neither repayment nor ownership shares.

These examples concern a **for-profit company**. What the company receives determines the asset; what it gives or owes determines the other side of the entry.

Source: ASC 805-50-30-2; ASC 845-10-30-1, 958-605-15-4, and 958-605-25-2.

Shares and gifts create different credits

Healing Hands receives equipment with a reliably measured fair value of $60,000. The equipment's fair value is more clearly evident than the value of shares. Consider 2 separate cases.

An unrelated investor receives newly issued shares.

ISSUE SHARES FOR EQUIPMENT

Equipment	$60,000	
Contributed capital		$60,000

The hospital receives an owner investment.

A private nonowner makes an unconditional gift.

RECEIVE EQUIPMENT AS A GIFT

Equipment	$60,000	
Contribution revenue		$60,000

No repayment or ownership exchange is required.

Source: ASC 805-50-30-2 (shares); ASC 845-10-30-1, 958-605-15-4, and 958-605-25-2 (gift).

EXCHANGES

Exchanging an existing asset



Account for both sides of the exchange

What does the replacement cost?

Measure its cost using the better-supported fair value of either the old asset or the replacement.

Is there a gain or loss on the old asset?

Compare its fair value with its carrying amount.

carrying amount = recorded cost – accumulated depreciation – recorded impairment

Source: ASC 845-10-30-1.

Which fair value provides stronger evidence?

More clearly evident means supported by more reliable evidence.

The old asset's value is clearer

- recent sales establish the old machine's market value
- the replacement is custom built, with no reliable standalone selling price

replacement cost = old asset's fair value + cash paid

The replacement's value is clearer

- the dealer regularly sells that model at a documented cash price
- the old machine is specialized and rarely traded

Record the replacement at that fair value.

old asset's fair value = replacement's fair value − cash paid

A trade-in allowance alone is not reliable evidence: a dealer may inflate both the allowance and the replacement's quoted price.

Source: ASC 845-10-30-1.

Cash payer: determine the result and replacement cost

Commercial substance: a significant change in expected cash flows—their risk, timing, or amount—or in value to the company.

Compare the old asset's fair value with its carrying amount.

Loss

Recognize the full loss.

Replacement cost = old asset's fair value + cash paid.

Commercial substance does not change this result.

Gain

Cash is at least 25% of total fair value? Or the exchange has commercial substance?

Yes to either

Recognize the full gain.

Replacement cost = old asset's fair value + cash paid.

No to both

Defer the gain.

Replacement cost = old asset's carrying amount + cash paid.

No gain or loss? Fair value equals carrying amount; add cash paid to that amount for replacement cost.

Use the replacement's fair value if it is more clearly evident. Source: ASC 845-10-25-6 and 30-1 through 30-6.

The park gives up a shuttle bus and cash

On December 31, 2026, Adrenaline Rush trades an older parking-lot shuttle bus for a newer used bus and pays cash.

Old bus

Recorded cost $150,000; accumulated depreciation $110,000.

Cash paid

$10,000

Replacement bus

The old bus's fair value is $55,000, more clearly evident than the replacement's value.

Depreciation is current, and no impairment has been recorded. The newer used bus substantially reduces expected fuel and repair costs, so this exchange has commercial substance.

Separate replacement cost from the old bus gain

Old bus: carrying amount and gain

carrying amount = recorded cost − accumulated depreciation

$150,000 − $110,000 = **$40,000**

gain = old fair value − old carrying amount

$55,000 − $40,000 = **$15,000**

Replacement bus: acquisition cost

replacement cost = old fair value + cash paid

$55,000 + $10,000 = **$65,000**

The cash payment increases the replacement's cost. It does not change the gain on the old bus.

Remove the old bus and record the replacement

DECEMBER 31, 2026: EXCHANGE WITH COMMERCIAL SUBSTANCE

New shuttle bus	$65,000	
Accumulated depreciation	$110,000	
Old shuttle bus		$150,000
Cash		$10,000
Gain		$15,000

The replacement is recorded at $65,000. The gain of $15,000 relates to the old bus exchanged.

Change the facts: no commercial substance

Assume the park expects no significant cash-flow change. Keep the same amounts, with no indicated impairment and cash below the 25% threshold.

$$\text{Cash share} = \frac{\text{Cash paid}}{\text{Old asset's fair value} + \text{Cash paid}}$$

$$\text{Park's cash share} = \frac{\$10{,}000}{\$55{,}000 + \$10{,}000} = 15.38\%$$

Replacement cost = old carrying amount + cash paid = $40,000 + $10,000 = **$50,000**.

The park recognizes no gain. It carries the old asset's remaining recorded cost into the replacement, plus the additional cash.

A lack of commercial substance does **not** allow a company to defer an indicated loss.

Source: ASC 845-10-30-3 and 30-6.

Record the exchange without commercial substance

Adrenaline Rush · Shuttle bus exchange continued: no commercial substance; old carrying amount $40,000; cash paid $10,000.

DECEMBER 31, 2026: EXCHANGE WITHOUT COMMERCIAL SUBSTANCE

New shuttle bus	$50,000	
Accumulated depreciation	$110,000	
Old shuttle bus		$150,000
Cash		$10,000

The park records the replacement at $50,000. It records no gain.

Your turn: exchange equipment with a loss

> Take about 2 minutes to work through this problem on your own or with your neighbor.

During 2026, Healing Hands exchanges an old diagnostic machine and pays $12,000. Depreciation on the old machine is current.

Old machine	Amount
Recorded cost	$160,000
Accumulated depreciation	$100,000
Fair value, more clearly evident	$45,000

Assume no commercial substance. There is no previously recorded impairment.

Calculate replacement cost and gain or loss. Explain whether the cash threshold changes your answer.

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Healing Hands gives up a machine with $60,000 carrying amount and $45,000 fair value, plus $12,000 cash. The exchange lacks commercial substance. What are the replacement cost and the gain or loss?

A Replacement $57,000; loss $15,000.

B Replacement $72,000; no loss.

C Replacement $60,000; loss $15,000.

D Replacement $45,000; loss $15,000.

iClicker | Answer 3 of 5

Correct answer: A

Healing Hands gives up a machine with $60,000 carrying amount and $45,000 fair value, plus $12,000 cash. The exchange lacks commercial substance. What are the replacement cost and the gain or loss?

A **Replacement $57,000; loss $15,000.**
A is correct. The hospital recognizes the $15,000 loss. Replacement cost is $45,000 fair value plus $12,000 cash.

B **Replacement $72,000; no loss.**
This choice adds cash to the $60,000 carrying amount and defers the loss. A lack of commercial substance does not permit deferral of an indicated loss.

C **Replacement $60,000; loss $15,000.**
This choice uses the $60,000 carrying amount as cost and also recognizes the loss. That entry would not balance.

D **Replacement $45,000; loss $15,000.**
This choice omits the $12,000 cash paid. The replacement cost also includes the cash.

Recognize the loss and include the cash payment

Healing Hands Hospital · Diagnostic machine exchange continued: no commercial substance; carrying amount $60,000; fair value $45,000; cash paid $12,000.

Loss = Old carrying amount – Old fair value = $15,000.

Replacement cost = Old fair value + Cash paid = $57,000.

Recognize the full loss regardless of commercial substance or the cash percentage. The hospital measures the replacement using fair value.

2026: EXCHANGE THE DIAGNOSTIC MACHINE

New equipment	$57,000	
Accumulated depreciation	$100,000	
Loss	$15,000	
Old equipment		$160,000
Cash		$12,000

The cash threshold does not change the loss

Healing Hands Hospital · Diagnostic machine exchange continued: does the cash threshold change the answer?

Cash is 21.05% of total fair value, below the 25% threshold. The exchange lacks commercial substance, so the hospital would defer a gain. It still recognizes the entire indicated loss.

Replacement cost = (Old carrying amount – Loss) + Cash paid.

($60,000 − $15,000) + $12,000 = **$57,000**, the same cost as the fair-value calculation.

Source: ASC 845-10-25-6 and 30-6.

LATER SPENDING

Spending after acquisition



What does the new spending accomplish?

Maintain expected service

Expense routine maintenance and repairs. A large payment can still maintain existing service.

Add future benefits

Capitalize an addition or improvement that increases capacity, quality, efficiency, or useful life.

Replace a major component

Capitalize the new component. Remove the old component's carrying amount and recognize any disposal gain or loss.

The company classifies spending by what it accomplishes. It does not rely on the invoice label alone.

Expense maintenance; capitalize added benefits

These 2027 payments concern Adrenaline Rush's older log flume ride, in service since 2018. It is separate from the amusement park ride purchased in 2026.

Adrenaline Rush pays $6,000 for routine inspections. They preserve the log flume's expected service.

It also pays $120,000 for a second boarding platform and loading equipment. The addition increases passengers boarded per hour.

Routine inspection: expense $6,000.

The park maintains the service already expected from the log flume.

Boarding addition: capitalize $120,000.

The park adds capacity, even though the log flume's useful life does not increase.

Replacing a major component

A major component replacement involves acquiring a new component and retiring the old one.

Acquire the new component

Capitalize its acquisition cost because it provides future service.

Retire the old component

- remove its recorded cost and accumulated depreciation
- recognize any disposal gain or loss
- with no proceeds, its remaining carrying amount is a loss

Record the log flume motor replacement

During 2027, Adrenaline Rush pays $95,000 cash to replace the log flume's separately tracked motor. The old motor cost $80,000; accumulated depreciation at replacement is $60,000.

Loss on retirement = Old carrying amount – Disposal proceeds. There are no proceeds.

2027: REMOVE THE DISCARDED MOTOR

Accumulated depreciation	$60,000	
Loss on retirement	$20,000	
Old motor		$80,000

2027: ACQUIRE THE NEW MOTOR

New motor	$95,000	
Cash		$95,000

Your turn: 3 hospital expenditures

> Take about 2 minutes to work through this problem on your own or with your neighbor.

During 2027, Healing Hands pays for 3 separate items.

Spending	What it accomplishes
Elevator inspection: $9,000	Maintains expected service.
Replacement elevator motor: $75,000	Replaces a separately tracked motor with $60,000 cost and $48,000 accumulated depreciation. No proceeds.
Additional blood chemistry analyzer: $28,000	Lets the lab process more blood samples per hour.

For each item, decide whether to capitalize or expense the payment. Prepare the journal entries, including removal of any replaced asset.

iClicker | Question 4 of 5

Healing Hands pays $9,000 for routine inspection, $75,000 for a replacement motor, and $28,000 for an additional blood chemistry analyzer. The discarded motor cost $60,000, has $48,000 accumulated depreciation, and has no disposal proceeds.

How much do these transactions reduce current-period income, before depreciation?

A $9,000

B $96,000

C $21,000

D $124,000

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Correct answer: C

Healing Hands pays $9,000 for routine inspection, $75,000 for a replacement motor, and $28,000 for an additional blood chemistry analyzer. The discarded motor cost $60,000, has $48,000 accumulated depreciation, and has no disposal proceeds.
How much do these transactions reduce current-period income, before depreciation?

A **$9,000**
Omits the old motor's $12,000 retirement loss.

B **$96,000**
Includes the new motor's cost as an expense instead of capitalizing it.

C **$21,000**
C is correct. The inspection expense and old motor's retirement loss reduce income. The new motor and analyzer are capitalized.

D **$124,000**
Includes both the new motor and analyzer as expenses instead of capitalizing them.

Separate current service, new benefits, and retirement

Item	Treatment	Reason
Inspection	Expense $9,000.	Maintains expected service.
New motor	Capitalize $75,000.	Provides service in future periods.
Old motor	Remove cost and accumulated depreciation; recognize $12,000 loss.	No proceeds: loss = cost − accumulated depreciation = $60,000 − $48,000 = $12,000.
Blood chemistry analyzer	Capitalize $28,000.	Lets the lab process more blood samples per hour.

A replacement involves both acquiring the new component and retiring the old one.

Record the hospital's later expenditures

2027: EXPENSE THE INSPECTION

Maintenance expense	$9,000	
Cash		$9,000

2027: CAPITALIZE THE REPLACEMENT MOTOR

Elevator motor	$75,000	
Cash		$75,000

2027: REMOVE THE OLD MOTOR

Accumulated depreciation	$48,000	
Loss on retirement	$12,000	
Old elevator motor		$60,000

2027: CAPITALIZE THE ADDITIONAL ANALYZER

Blood chemistry analyzer	$28,000	
Cash		$28,000

CONSTRUCTION

Asset construction costs



Accumulate construction costs until the asset is ready

The company may use its own employees or hire a construction company to build the asset.

During construction

Accumulate eligible materials, labor, and allocated overhead in **Construction in progress**.

→

When ready for use

Transfer the completed cost to the appropriate operating asset account.

→

During use

Allocate depreciable cost through depreciation, beginning when the asset is ready.

Expense abnormal waste and rework. They are excluded from normal construction cost.

Why can construction interest become asset cost?

Construction takes time. Financing costs incurred while preparing the asset can be part of getting it ready for use.

Avoidable interest estimates interest the company could have avoided if it had not made those construction expenditures.

The company assigns eligible interest to the asset, then recognizes expense through later depreciation.

Capitalization allocates actual interest cost. It does not create an additional cost or interest on owner investment.

Source: ASC 835-20-30-2.

Which assets qualify for interest capitalization?

Assets that can qualify

- **Construction for the company's own use:** a hospital wing being built for patient care.
- **Assets produced as discrete projects for sale or lease:** a ship built for a customer.

Interest can become asset cost during eligible preparation.

Assets that do not qualify

- **Assets already ready for use:** equipment purchased ready to operate.
- **Inventory routinely produced in large quantities on a repetitive basis.**

Interest is not capitalized as part of these assets' costs.

Source: ASC 835-20-15-5 and 15-6.

Start when all conditions are present; stop at readiness

Expenditures have been made.	The company has committed funds to the asset.
Preparation is in progress.	Activities necessary for the intended use are underway.
Interest is being incurred.	The company has actual borrowing costs.

> **Start when the last condition is met.** Interest incurred before then is expense.

Stop when the asset is substantially complete and ready for its intended use, even if management delays using it.

If the company suspends substantially all construction activity, capitalization stops until work resumes. Brief interruptions, externally imposed interruptions, and delays inherent in construction do not stop it.

Source: ASC 835-20-25-3 through 25-6.

Match construction spending to annual interest rates

Interest depends on how much is spent and how long the funds are committed during the eligible period.

> **Count only eligible months in the current year.** For each payment, the numerator counts months when all three conditions are met—even if interest is incurred all year.

$$\text{Weighted expenditure} = \text{Expenditure} \times \frac{\text{Months invested during the current year}}{12}.$$

- Add the weighted payments to find **weighted-average accumulated expenditures**: a full-year equivalent of the spending.
- Apply the borrowing rates to that total to estimate avoidable interest.

Source: ASC 835-20-30-3.

Which borrowing rates apply to weighted expenditures?

Start with the total weighted construction expenditures.

First: the construction-loan portion

- use the construction loan's rate for weighted expenditures equal to the loan amount
- if total weighted expenditures are lower, use that rate for all of them

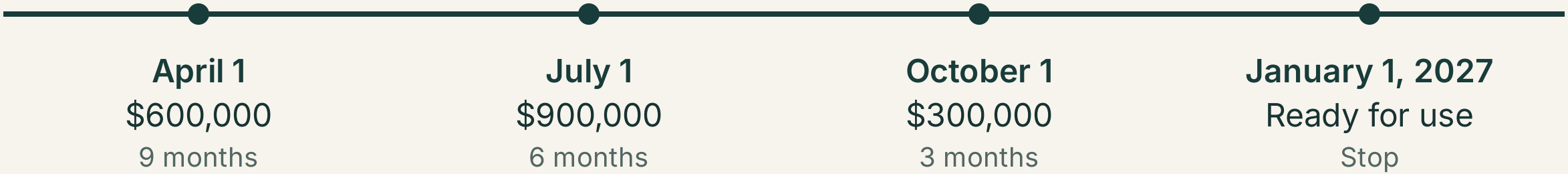
Then: any remaining weighted expenditures

- if weighted expenditures exceed the loan amount, apply the weighted general borrowing rate to the excess

Apply these rates to the weighted expenditures to calculate **avoidable interest**.

Adrenaline Rush builds an indoor attraction building

Construction is active from April 1 through December 31, 2026. The building is ready January 1, 2027. Land and ride equipment are separate.



The payments are eligible construction costs. Interest is incurred throughout the period, with no construction suspension.

Convert each payment to a full-year equivalent

Multiply each payment by the fraction of a full year remaining in the eligible period.

Payment date	Payment	Annual fraction	Weighted amount
April 1	$600,000	$\frac{9}{12}$	$450,000
July 1	$900,000	$\frac{6}{12}$	$450,000
October 1	$300,000	$\frac{3}{12}$	$75,000
Total	**$1,800,000**		**$975,000**

$975,000 is the full-year equivalent used for interest. Actual construction spending remains $1,800,000.

Find each loan's rate and actual interest

A **specific construction loan** is obtained for the project. **General borrowings** finance the company more broadly.

The construction loan and first general loan are outstanding all year. The second general loan begins July 1, 2026.

Interest incurred = Principal × Annual rate × Fraction of year outstanding.

Borrowing	Principal	Annual rate	Months outstanding	Interest incurred
Specific construction loan	$800,000	6%	12	$48,000
General loan	$1,000,000	8%	12	$80,000
General loan	$500,000	10%	6	$25,000
Total interest incurred				**$153,000**

Second general loan: $\$500{,}000 \times 10\% \times \frac{6}{12} = \mathbf{\$25{,}000}$.

Weight the general rates by the amounts borrowed

Use only the general loans. Weight both interest and principal for time outstanding.

Borrowing in 2026	Principal	Annual rate	Interest incurred
Construction loan: excluded	$800,000	6%	$48,000
General loan: January–December	**$1,000,000**	8%	**$80,000**
General loan: July–December	**$500,000**	10%	**$25,000**

Second loan's weighted principal: $\$500{,}000 \times \frac{6}{12} = \mathbf{\$250{,}000}$.

$$\text{General borrowing rate} = \frac{\text{Interest incurred on general loans}}{\text{Time-weighted average general-loan principal}}$$

$$\text{General borrowing rate} = \frac{\$80{,}000 + \$25{,}000}{\$1{,}000{,}000 + \$250{,}000} = \mathbf{8.4\%}$$

Source: ASC 835-20-30-3.

Apply the rates to different portions of weighted spending

Begin with **$975,000** of weighted expenditures.

Apply the specific construction loan rate up to that loan's principal. Apply the general rate to the remaining weighted expenditures.

Weighted expenditures: $975,000

$800,000	$175,000
Specific construction loan rate	General borrowing rate
6%	8.4%

Remaining weighted expenditures = $975,000 − $800,000 = **$175,000**.

Apply each borrowing rate to its share of weighted expenditures, regardless of which loan funded an individual payment.

Calculate the interest associated with weighted spending

Avoidable interest = Specific portion × Specific rate + Remaining portion × General rate.

Weighted expenditures: $975,000

Specific construction loan rate	General borrowing rate
$800,000	$175,000
× 6%	× 8.4%
$48,000	$14,700

Avoidable interest = $48,000 + $14,700 = $62,700.

Next, compare avoidable interest with the interest actually incurred.

Capitalized interest cannot exceed actual interest

Actual interest: outstanding loans

Borrowing	Principal	Rate	Months	Interest
Construction	$800,000	6%	12	$48,000
General	$1,000,000	8%	12	$80,000
General	$500,000	10%	6	$25,000
Total				**$153,000**

Avoidable interest: weighted spending

$800,000 × 6% = $48,000

$175,000 × 8.4% = $14,700

Total = $62,700

Capitalize the smaller of avoidable interest and actual interest; expense the rest.

Actual interest: $153,000

$62,700	$90,300
Capitalized interest	Interest expense

Source: ASC 835-20-30-6.

Allocate interest, then complete the building cost

Assume all 2026 interest remains payable at year-end.

DECEMBER 31, 2026: ALLOCATE INTEREST

Construction in progress	$62,700	
Interest expense	$90,300	
Interest payable		$153,000

Completed building cost = Eligible construction spending + Capitalized interest.

$1,800,000 + $62,700 = **$1,862,700**.

Transfer that completed cost from construction in progress to Buildings when the building is ready January 1, 2027.

Your turn: a hospital wing is ready before move-in

> Take about 5 minutes to work through this problem on your own or with your neighbor.

Healing Hands builds a wing from January 1 through September 30, 2026. It is ready October 1, but patients move in during December.

Payment date	Eligible construction payment
January 1	$400,000
April 1	$600,000
July 1	$400,000
Total construction payments	**$1,400,000**

Its only loan is general debt of $2,000,000 at 9%, outstanding all year.

Find weighted expenditures, capitalized interest, annual interest expense, and completed wing cost.

The eligible period ends when the wing is ready

The wing is ready October 1, so count each payment's eligible months only through September 30. December move-in does not extend the weighting period.

Payment	Eligible months	Weighted amount
January: $400,000	9	$300,000
April: $600,000	6	$300,000
July: $400,000	3	$100,000
Total weighted expenditures		**$700,000**

Each payment is multiplied by eligible months divided by 12. The annual rate still applies to a full-year equivalent.

Separate wing cost from annual interest expense

Healing Hands Hospital · Wing construction continued: ready October 1, 2026; general debt $2,000,000 at 9%, outstanding all year.

Calculation	Result
Avoidable interest = $700,000 × 9%	$63,000
Actual annual interest = $2,000,000 × 9%	$180,000
Capitalized interest = Smaller amount	**$63,000**
Annual interest expense = $180,000 − $63,000	**$117,000**
Wing cost = $1,400,000 + $63,000	**$1,463,000**

The hospital incurs interest for the full year, including months after the wing is ready.

iClicker | Question 5 of 5

A qualifying construction project has $40,000 of calculated avoidable interest. The company incurred $8,000 of total actual interest during the year. How much interest should it capitalize?

A $40,000

B $8,000

C $32,000

D $48,000

iClicker | Answer 5 of 5

Correct answer: B

A qualifying construction project has $40,000 of calculated avoidable interest. The company incurred $8,000 of total actual interest during the year. How much interest should it capitalize?

A **$40,000**
Ignores the actual-interest ceiling.

B **$8,000**
B is correct. Capitalize the smaller of avoidable interest and actual interest incurred.

C **$32,000**
Subtracts actual interest from avoidable interest instead of selecting the smaller amount.

D **$48,000**
Adds two measures of interest instead of selecting the smaller amount.

NEXT MEETING

Next class: Record depreciation, estimate changes, and disposal

Tuesday, November 17, 2026

Unit 5 review assignment due:
Sunday, November 15, at 11:59 PM.

