

**Module 5-4 Automobile Insurance Lesson Plan**  
**(Automobile Ownership Chapter)**

**Objectives:**

1. Students will know vocabulary words related to the purchase of auto insurance.
2. Students will be able to describe the different types of auto insurance coverage.
3. Students will be able to compute insurance costs.
4. Students will be able to compute payments on insurance claims.

**WA State Mathematics Standards:**

- A1.1.A Select and justify functions and equations to model and solve problems.
- A1.1.B Solve problems that can be represented by linear functions and equations. (Partial)
- A1.8A-H Core processes. Reasoning, problem solving, and communication.

**WA State Writing Standard:**

- 2.4.1 Produces documents used in a career setting.

**WA State Communication Standard:**

- 2.1.1 Analyzes the needs of the audience, situation, and setting to adjust language and other communication strategies.
- 2.2.1 Uses communication skills that demonstrate respect.

**National Business Education Standards:**

- Economics & Personal Finance VIII. Protecting Against Risk – Level 3
- Computation VI. Problem-Solving Applications – M. Insurance – Level 3

**Common Core Standards:**

- F-LF, S-ID

**Skills needed:**

- Basic Mathematics Skills of adding, subtracting, multiplying, and dividing  
(Remediation Resources: CORD Units B & C, AMME Units 6 & 8)
- Write and Solve Linear Equations  
(Remediation Resources: CORD Units 15 & 16, AMME Units 6 & 8)
- Stem & Leaf Plot  
(Remediation Resources: Module 5-3, Workbook pages 69-70)

**Assessments:**

- Informal Assessment through conversations with students to check for understanding
- Journal/Notebook entries – entry tasks, check your understandings, home studies,...
- Home studies assignments
- Informal Assessment of participation during group discussions
- Applications questions
- 2 Quiz scores (vocabulary and full module quiz)
- Student original Application question – creation and completion with another student
- Guest Speaker Prep questions
- Informal – Participation during guest speaker
- Informal – Greet/thank/communicate/shake hands of guest speaker

Professional Thank you note – written

### Enrichment Activities

#### Or Remediation for students who fail Module 5 Quiz or need additional practice:

Workbook pages 71 and 72

Chapter 5 Application Questions #9 and 11, page 286

Purplemath.com

CORD Unit 15 and 16

AMME Unit 6

(After additional work is done and understanding demonstrated, then allow re-take of quizzes)

### Leadership:

Have students arrange the guest speaker. Greet/meet/deliver/return to classroom on the day. Discuss topics with agent prior to visit. Get permission from the school as required. Send thank you notes to speaker after their visit. Etc...

Also see “Chapter 5 Assessment/Leadership Activities” at the end of this lesson plan for more ideas.

**Total Time: 8 Hours** (with a guest speaker on the 8<sup>th</sup> day)

**Day 1: ( 1 hour)**

**Objectives:** 1 and 2 listed above.

**Materials needed:** Financial Algebra Text book, 3x5 index cards, vocabulary worksheets, pens/markers/crayons, white/colored unlined notebook size paper, computer access. Etc...

**Entry Task:** Students are to reply to the question, “What could go wrong when you drive?” by writing their responses in their journals/notebooks.

**Read:** Pages 238 and 239 (stopping before the Skills and Strategies section).

**Discuss:** details of this section. What is the difference between the types of coverages? Why do students need auto insurance? How expensive are hospital and car repair visits? What kind of property could be damaged and how much could that cost? Do you have to, legally, have auto insurance? How can you lower your premiums? ...etc. What questions do students have about auto insurance?

**Vocabulary Mastery Strategy:** Implement the strategy that best works for your students to learn the vocabulary. For example, have them create 3x5 flash cards or draw pictures on paper/notecards, use previously designed vocabulary worksheets, or have students practice vocabulary words on a website where they can create virtual flash cards, or use the South-Western textbook web site’s flash cards. Students may have different needs/likes and so several methods should be offered.

**Practice:** Students should spend the rest of the hour practicing these new vocabulary words, individually or in pairs.

<https://wa-appliedmath.org/>

**Exit Task:** Students need to show the teacher their completed vocabulary strategy to exit the room.

**Home Studies:** Have students take home their vocabulary strategy and have them ask their parents or older siblings to define these vocabulary words. Do they know all of them? Report results tomorrow.

### Day 2: ( 1 hour)

**Objectives:** 1, 2, & 3 listed above.

**Materials needed:** Financial Algebra Text book, Student's individual Vocabulary Practice Strategy designed yesterday.

**Entry Task:** Students are to reply to the question, "How well did your family members do on your insurance quiz last night? Would you give them a passing score? What were the hardest words for them?"

**Discuss:** Entry Task replies.

**Practice Quiz:** Students have 5 minutes to review vocabulary from yesterday. Give students a matching quiz with all of the vocabulary words in this module. They have 4-5 minutes to take the quiz individually. Then give them 2-3 minutes to check with their neighbor. Go over the answers with the class and have students score their own quizzes and record their score in their journal/notebook next to today's entry task response. (Scores are not recorded. This is practice. Students record these scores so that they will hopefully see progress in the next few days.)

**Guided Practice:** As a whole group, read and discuss Example 1 on page 239. Have students complete the "Check Your Understanding" on page 239 and record their response in their notebook/journal. After students appear to be done, discuss their answer(s). Continue working through example 3 using this process.

**Exit Task:** Students need to show the teacher their completed vocabulary strategy to exit the room.

**Home Studies:** Students are to ask their parents if they pay for their premiums annually, quarterly, or monthly and why did they choose this method of payment? Also, what is the deductible amount they chose and why?

### Day 3: ( 1 hour)

**Objectives:** 1, 2, 3, and 4 listed above.

**Materials needed:** Financial Algebra Text book, Student's individual Vocabulary Practice Strategy designed earlier, and home studies card.

**Entry Task:** Students are to reply to these questions, "What payment method did your parents chose and why? What is the amount of the deductible they chose and why? Would you choose the same payment method and deductible for you? Why/why not?"

**Discuss:** Entry Task replies. Students only need to share what they feel comfortable sharing.

**Practice Quiz:** Give students a crossword puzzle to complete with the vocabulary words in it. They are to work individually. After 5-7 minutes, give answers and have students score their own puzzles. Finally, have students record their scores in their notebook/journal.

**Discuss:** Did your score improve from yesterday? Why/why not? What are you going to do to get 100% tomorrow?

**Guided Practice:** As a whole group, read and discuss Examples 4 and 5 on page 241. Have students complete the “Check Your Understanding”s and record their responses in their notebook/journal. After students appear to be done, discuss their answer(s). Continue working through example 5 using this process (same as yesterday).

**Applications/Guided Practice:** As a group, complete Applications 1, 7, 9, 10, and 16 on page 242-244. Read the Application problem, ask students how they are going to solve the problem, give them time to start/complete it, then go over the problem and answer with them.

**Exit Task:** Students pick up a home studies card for tonight – to be signed by the parent/guardian.

**Home Studies:** Students are to ask their parents to see their insurance card. What are the numbers for Bodily Injury and Property Damage on their cards. Also, ask their parents what those numbers mean. If the adult isn't sure, the student should explain it to them. Finally, the adult signs the home studies card to show the student completed this task.

#### **Day 4: ( 1 hour)**

**Objectives:** 1, 2, 3, and 4 listed above.

**Materials needed:** Financial Algebra Text book, Student's individual Vocabulary Practice Strategy designed earlier, home studies card signed.

**Entry Task:** Students are to turn in their signed, home studies card from last night. The teacher will initial their notebook/journal for today's entry task as the card is turned in.

**Work Day:** Students are to work on the Applications Problems on pages 242-244. They are due tomorrow.

**Exit Task:** Have students spend the last 5-10 minutes studying the vocabulary words. There will be a quiz at the beginning of the hour tomorrow.

**Home Studies:** Students are to study the vocabulary words. For extra credit, have a parent sign a quick note stating that the student practiced with them and knew the words well. Possible, students may want to complete the Applications work at home.

#### **Day 5: ( 1 hour)**

**Objectives:** 1, 2, 3, and 4 listed above.

<https://wa-appliedmath.org/>

**Materials needed:** Financial Algebra Text book, Student's individual Vocabulary Practice Strategy designed yesterday, and home studies extra credit note.

**Entry Task:** Students have 3-5 minutes to review the vocabulary with a partner or individually.

**Quiz:** Give students the vocabulary quiz (objective 1). When they are done, they need to finish the Applications.

**Work Day:** Students are to work on the Applications Problems on pages 242-244. They are due today.

**Exit Task:** Students turn in their Applications work as they exit.

**Home Studies:** Students are to ask their parent/guardian how they would respond to Applications question #1, "Never lend your car to anyone to whom you have given birth." (Erma Bombeck, Humor Writer).

### Day 6: ( 1 hour)

**Objectives:** 1, 2, 3, and 4 listed above.

**Materials needed:** Financial Algebra Text book

**Entry Task:** Students are to answer this question in their journal/notebook, "How did your parent/guardian respond to the quote? Did they agree/disagree? Did they tell you a story that applies to this saying? If so, what did they say?"

**Applications:** Give students their graded Applications papers back. As a large group, go over commonly missed questions. Allow students to re-work missed questions and turn in for partial credit (copying isn't allowed. Work must be completed in class and turned in today.) These papers can be picked up by students at the end of the day to use as study material tonight.

**Practice Quiz:** In the last 10-12 minutes of class, students are to create an Applications question of their own that contains two parts (see Applications questions). It must be a math problem and not a vocabulary problem. Then they must exchange problems with another student, complete the question, and re-exchange to score the questions.

**Exit Task:** Students turn in their created, exchanged, and scored problems as they exit in pairs.

**Home Studies:** Students are to study their Applications work or the text in preparation of tomorrow's quiz.

### Day 7: ( 1 hour)

**Objectives:** 1, 2, 3, and 4 listed above.

**Materials needed:** Module 5-4 Quiz

<https://wa-appliedmath.org/>

**Entry Task:** Students have 3-5 minutes to review module 5-4 in the text.

**Quiz:** Give students the quiz (objectives 2-4).

**Guest Speaker Prep:** When students are done with the quiz, they need to write at least 5 questions to ask the guest speaker tomorrow. (May be done as home studies if student doesn't have time in class.)

**Exit Task:** Students turn in their Guest Speaker questions as they exit. (Student writes a note stating that they will turn in their questions tomorrow, done as home studies, if class time runs out.)

**Home Studies:** Students may need to complete the Guest Speaker Prep if not done in class today.

## Day 8: ( 1 hour)

**Objectives:** 1, 2, 3, and 4 listed above.

**Materials needed:** Guest Speaker – Insurance Agent and G.S. preps completed by students. Guest speaker asked to address (prior to day of visit): Types of auto insurance. What are the normal coverages and mandatory coverages. What are the costs of insurance, especially for young drivers? What can they do to get their premiums lowered? What's the best way to pay premiums? What questions should students ask an insurance agent before buying insurance? How can their insurance agent help if there is an accident? What should students do if they are in an accident – driver or passenger? Careers in the insurance industry. Etc...

**Entry Task:** Record/Collect home studies g.s. preps as needed. Return preps to students to use today with the guest speaker. (Teacher read over questions last night/yesterday and edited/voided any inappropriate questions.)

**Exit Task:** Students are to thank the guest speaker with a 'real thank you' and shake their hand on their way out of the classroom.

**Home Studies:** Students are to write a complete, appropriate thank you note to the guest speaker using the speaker's full name and a real comment of thanks.

## End of Chapter 5 Assessment/Additional Leadership Activities:

Choose an activity from pages 282-283 or

Have students call local agents and go on-line to get quotes for themselves. Summarize/analyze their results, choose a company to buy insurance from, and write a short paper discussing why they would choose a certain company. Finally, have students compare their individual results with each other and have them compare/contrast their results – discuss the differences in quotes (age, experience, training, vehicle, miles driven, gender, grades, etc...).

- 1) Compare and contrast comprehensive insurance and collision insurance.

Comprehensive and Collision both protect the insured against financial loss for the insured's vehicle in the event of a claim. Comprehensive covers damages that are not the fault of the insured such as vandalism and damage from weather events or being stolen. Collision covers damages to the vehicle that are caused by the insured during operation, such as an at fault accident.

- 2) Explain what the following Bodily Injury and Property Damage formula means (in the correct order):  
25/100/50

The numbers represent dollars by the thousand that would be paid by the insurance company to the other party in the event of an insured's "at fault" accident. \$25,000 maximum bodily injury per person. \$100,000 is the maximum total amount the insurance company will pay out per accident. \$50,000 is the maximum amount paid for property damages.

- 3) Read the following scenarios and then write a linear equation to solve for x.

- a. Brent's annual premium is \$1447. He does not have the funds to pay for it all at once, so he requests a monthly payment schedule from his insurance company. They are willing to allow it, but will charge an additional \$2 per month for processing. Brent's new monthly payment will be 'x' amount.

$$X = 1447/12 + 2$$

$$X = 120.58 + 2$$

$$X = 122.58$$

- b. Tai has a \$500 deductible on his comprehensive insurance. A wicked storm blows through the area and a tree falls across the roof of his truck, totaling it. The insurance company assesses Tai's truck with a value of 'x' and Tai receives a check in the amount of \$2250. What value did the insurance company place on Tai's truck?

$$X - 500 = 2250$$

$$+500 = +500$$

$$X = 2750$$

- c. Marcie has BI and PD coverages of 25/100/50. As Marcie makes a trip to the store, she checks a quick text from her mom and doesn't see the stop sign ahead. She runs into a mini-van with a mother and her two children, injuring all three. Marcie is sued and the injured persons were awarded the following amounts: Mother \$15,000 Child 1 \$35,000 Child 2 \$30,000  
Marcie is personally financially liable for any amounts over the per person limit and the per occurrence limit. How much is Marcie personally liable for with this accident?

Mother \$15,000 covered: 15,000

Child 1 \$35,000 covered: 25,000 not covered 10,000

Child 2 \$30,000 covered: 25,000 not covered 5,000

Total \$80,000

Total 15,000 Marcie is liable for.

\$80,000 < \$100,000 so the per person limits are covered, however, Marcie is responsible for the residual \$15,000 that was not covered by the per person limits.