me:	
~	SCORE:
Class:	
Baldivis Secondary College	Year 12 Essential Mathematics Unit 2 Mini Test 8 2018 Topic – Interest Full working out MUST be shown to get full marks for each question.
Total Time:	30 minutes
Weighting:	5%
Equipment:	To be provided by the student: Pen, pencil, ruler, scientific calculator, 1 single sided page of A4 notes
b. 1	4500 × 0.1 × 5 2,000 at 7.5% for 2.5 years 2,000 × 0.0 75 × 2.5
a. So ar	the missing variable in the following equations: [2 + 2 + 2 = 6 Marks] am earned \$55 simple interest at 2% for 5 years, how much was the principle mount?
b. Sh int	aun earned \$1485 from a principle of \$4500 across 3 years. What was the simple erest rate? $\frac{1485}{(4500\times3)} = 0.11 > 1(1)$
c. Sho yeo	Sound earned \$675 on a principle of \$1,500 at 7.5% simple interest across some ars. What was the number of years? 675 $(1500 \times 0.075) = 6400$

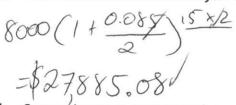
/22

3. Madeline invests in a compound interest fund at 8.5%, compounding once per year, for 15 years. She puts \$8,000 in as principle. What is the value of the account after 15 years?

[3 Marks]

=\$27197.94/

- 4. Madeline finds another account with the same interest rate, but compounds twice per year. She puts another \$8000 in for 15 years. [3 + 1 = 4 marks]
 - a. How much does she make after 15 years?



b. Comparing your answer with question 3, which account is better.

Al(ount 2 /

- 5. Alex buys a work ute for \$55,990 that she depreciates once a year for 5 years at 11%.

 [2 + 3 = 5 marks]
 - a. How much would Alex lose after one year?

55990 x 0.11 = \$6158.9

b. How much would she lose after the 5 years?

 $55990 \times (1-0.11)^{5}$ = 31265.15 -31265.15 324724.85

END OF ASSESSMENT