STK-MAT3700 - Introduction to Mathematical Finance and Investment Theory.

## Quize 1

1. The loan is in the amount of $9000 \$$ at a simple discount rate of $14 \%$ per annum. The borrower has received an amount of $8000 \$$. How long was the loan extended? Assume that there are 365 days in a year.

| A | B | C | D |
| :---: | :---: | :---: | :---: |
| 320 | 290 | 326 | 312 |

2. The amount to be deposited in the bank for 2 years at a simple $10 \%$ per annum in order to receive $\$ 8,400$ at the end of the 2nd year is

| A | B | C | D |
| :---: | :---: | :---: | :---: |
| 7000 | 6720 | 6942 | 7115 |

3. After how many years a deposit at a compound interest rate of $8 \%$ per annum will increase from $\$ 10,000$ to $\$ 20,000$.

| A | B | C | D |
| :---: | :---: | :---: | :---: |
| 7 | 9 | 10 | 11 |

4. What is the interest rate for depositing money in a bank if the depositor wants to withdraw 120,000 NOK with a starting capital of 100,000 NOK in 2 years?

| A | B | C | D |
| :---: | :---: | :---: | :---: |
| $10 \%$ | $7 \%$ | $9 \%$ | $11 \%$ |

5. The accumulated value of the investment at a continuous rate of $16 \%$ over 6 years is $100000 \$$. Calculate its present value.

| A | B | C | D |
| :---: | :---: | :---: | :---: |
| 38291 | 41044 | 38289 | 51020 |

