

# SA302 TIME VALUE OF MONEY

## Examples of Present & Future Value Scenarios

### FUTURE VALUE OF A SUM

- How much would an **inheritance received today** be worth in 10 years if invested?
- If you **sold your home** and invested the money received for 20 years, how much you would have then?
- How much would a **lump-sum insurance settlement** be worth in 5 years?

### FUTURE VALUE OF A STREAM OF CASH FLOWS

- How much will you have saved for **retirement** if you contribute 10% of your current salary for the next 20 years?
- How much will you have in 10 years if you save \$100 per month in a **college savings** account for your child?
- If you save \$50 per month for the next 3 years how much will you have saved up for a dream **vacation**?
- Will a business have enough to fund pension obligations if it contributes \$50,000 annually over the next 5 years?

### FUTURE VALUE PAYMENTS

- How much would you need to save annually to have \$1 million in **retirement savings** in 30 years?
- What would the monthly savings amount be to have \$10,000 saved up for your anniversary **vacation** in 3 years?
- What payment would be required to reach a required \$100,000 available for your children's **college fund** in 10 years?

### PRESENT VALUE OF A SUM

- Would you rather receive \$100,000 today or \$120,000 in a year?
- How much would a business need to set aside today to have enough to replace a \$100,000 piece of **equipment** in 5 years?
- How much is a \$35,000 **trust distribution** that will be received in 10 years worth today?
- How much is a **land investment** that is expected to be sold at \$1,000,000 in 10 years worth today?

### PRESENT VALUE OF A STREAM OF CASH FLOWS

- Would you rather receive \$1,000 per month for 20 years or \$150,000 today?
- What **lump sum settlement** would be adequate to provide for a needed \$15,000 in annual support.
- What is the current value of a **bond** that provides 4% annual interest and then a face value of \$10,000 in 8 years?

### PRESENT VALUE PAYMENTS

- How much would your monthly payment be for a 30-yr home **mortgage** at 3.5%?
- How much would your monthly payment be for a 5-yr **automotive loan** at 4.35%?
- How much would your monthly payment be for a 10-yr **student loan** at 7%?
- How much will a \$100,000 **lump sum insurance settlement** provide on an annual basis, assuming that this money is