Half Course 3

Analysis of Games and Numbers General Outcome: **Develop critical thinking** skills

Specific Outcomes

It is expected that students will:

11E3.A.1. Analyze puzzles and games that involve numerical reasoning, using problem-solving strategies.

[C, CN, PS, R]

Interest and Credit

General Outcome: **Develop an understanding** of credit and the effects of interest

Specific Outcomes

It is expected that students will:

11E3.I.1. Demonstrate an understanding of compound

[CN, ME, PS, T]

- 11E3.I.2. Demonstrate an understanding of credit options, including:
 - credit cards
 - loans.

[CN, ME, PS, R]

- 11E3.I.3. Solve problems that require the manipulation and application of formulas related to:
 - simple interest
 - finance charges.

[CN, PS, R]

3-D Geometry

General Outcome: **Develop an understanding of** spatial relationships applied to volume and surface area

Specific Outcomes

It is expected that students will:

11E3.G.1.Solve problems that involve SI and imperial units in surface area measurements.

[C, CN, ME, PS, V]

11E3.G.2. Solve problems that involve SI and imperial units in volume and capacity measurements.

[C, CN, ME, PS, V]

- 11E3.G.3. Solve problems that require the manipulation and application of formulas related to:
 - volume and capacity
 - surface area

[CN, PS, R]

Statistics

General Outcome: Develop statistical reasoning

Specific Outcomes

It is expected that students will:

- 11E3.S.1. Solve problems that involve creating and interpreting graphs, including:
 - bar graphs • histograms

 - line graphs
 - · circle graphs.

[C, CN, PS, R, T, V]

Half Course 4

Analysis of Games and Numbers

General Outcome: **Develop critical thinking** skills

Specific Outcomes

It is expected that students will:

11E4.A.1. Analyze puzzles and games that involve numerical reasoning, using problem-solving strategies.

[C, CN, PS, R]

Manitoba

Managing Money

Develop an understanding General Outcome: of managing money

Specific Outcomes

It is expected that students will:

11E4.M.1. Solve problems that involve personal budgets. [CN, PS, R, T]

11E4.M.2. Demonstrate an understanding of financial institution services used to access and manage finances.

Relations and Patterns

General Outcome: **Develop proportional**

reasoning

Specific Outcomes

It is expected that students will:

- 11E4.R 1. Demonstrate an understanding of slope:
 - as rise over run
 - as rate of change

by solving problems.

[C, CN, PS, V]

11E4.R 2. Solve problems by applying proportional reasoning and unit analysis.

[C, CN, PS, R]

11E4.R.3. Solve problems that require the manipulation and application of formulas related to slope and rate of change.

[CN, PS, R]

11E4.R.4. Solve problems that involve scale.

[PS, R, T, V]

11E4.R.5. Demonstrate an understanding of linear relations

- · recognizing patterns and trends
- graphing
- creating tables of values
- writing equations
- interpolating and extrapolating
- solving problems.

[CN, PS, R, T, V]

Trigonometry

General Outcome: **Develop spatial sense** related to triangles

Specific Outcomes

It is expected that students will:

11E4.TG.1. Solve problems that involve two and three right

[CN, PS, T, V]

Design Modeling

General Outcome: **Develop spatial sense**

Specific Outcomes

It is expected that students will:

11E4.D.1. Model and draw 3-D objects and their views.

[CN, R, V]

11E4.D.2. Draw and describe exploded views, component parts and scale diagrams of simple 3-D objects.

[CN, V]

Processes:

C – Communication PS – Problem Solving

V – Visualization

CN – Connections

R – Reasoning

ME – Mental Mathematics and Estimation

T – Technology