

Released Questions with Provincial Data

Mathematics

In This Resource:

- Details of the Assessment
- Results Reported
- Definitions of the Categories of Knowledge and Skills
- Suggested Uses for This Resource
- Questions
- Questions with Answers and Provincial Data



This resource is provided to support educators with the mathematics component of the EQAO Assessment of Reading, Writing and Mathematics, Junior Division. Each mathematics question on the assessment is mapped to a category of knowledge and skills and an overall and a specific expectation in *The Ontario Curriculum, Grades 1-8: Mathematics* (2020). This resource includes the definitions of the categories of knowledge and skills as well as examples of assessment questions. Detailed information about each question, including the overall expectation and category of knowledge and skills to which the question is mapped, the correct answer and provincial data, are provided. For more information about the assessment design, refer to the Framework at www.eqao.com.

DETAILS OF THE ASSESSMENT

The EQAO Assessment of Reading, Writing and Mathematics, Junior Division, is an online assessment completed by students at the end of Grade 6. The mathematics component of the assessment uses a multi-stage computer adaptive testing model that adapts to the individual student's performance as the student progresses through the stages of the assessment (e.g., based on a student's performance in Stage 1, the student will be routed to a set of questions that is overall easier or more difficult in Stage 2). Though students are routed to different question sets, outcomes are put on the same scale, and overall levels of achievement are comparable.

The mathematics component assesses the knowledge and skills that are defined in the expectations found in *The Ontario Curriculum, Grades 1–8: Mathematics* (2020). The questions assess students' knowledge and skills in these strands:

- Number
- Algebra
- Data
- Spatial Sense
- Financial Literacy

Although the assessment does not measure the content in the Social-Emotional Learning (SEL) Skills in Mathematics and the Mathematical Processes strand, students may be required to apply mathematical processes while completing the assessment.

Each question on the assessment is mapped to an overall and a specific curriculum expectation. Each question is also mapped to one of these categories of knowledge and skills:

- Knowledge and Understanding (**KU**)
- Application (**AP**)
- Thinking (**TH**)

Questions in the mathematics component do not assess the Communication category of knowledge and skills.

During each stage of the assessment, students complete questions mapped to each of the three categories of knowledge and skills assessed. The category assigned to each question assumes that students have been taught the knowledge and skills outlined in the Grade 6 mathematics curriculum, as the EQAO assessment is completed near the end of Grade 6.

Regardless of how students are routed as they progress through the stages of the assessment, students complete the same number of questions from each of the various strands assessed, as the assessment follows a blueprint. The blueprint, which can be found in the *Framework*, defines how many questions a student will complete from each strand. This makes the assessment comparable from year to year. (For more information, see www.eqao.com.)

RESULTS REPORTED

The EQAO Assessment of Reading, Writing and Mathematics, Junior Division, is a standards-referenced large-scale assessment based on the expectations and standards (levels of achievement) for student proficiency in *The Ontario Curriculum*. EQAO reports an overall level of achievement in mathematics for each student. EQAO does not provide results by strand or by category of knowledge and skills at the student level, as each student does not complete enough questions mapped to each strand or skill to report on each accurately. However, through the EQAO secure reporting tool, the agency provides reports by strand and skill at the school, board and provincial levels for schools and boards to use for improvement planning.

DEFINITIONS OF THE CATEGORIES OF KNOWLEDGE AND SKILLS

EQAO has adapted the definitions of the three categories below from the achievement chart for mathematics found in the Ontario mathematics curriculum. This section outlines the definitions EQAO uses to determine the category for each question on the assessment.

For previous examples of questions mapped to the categories of knowledge and skills, please refer to the [2023 edition](#) of this resource.

Knowledge and Understanding

A question is mapped to Knowledge and Understanding if in order to answer the question students must demonstrate only

- subject-specific content (knowledge) and/or
- comprehension of its meaning and significance (understanding).

These questions assess basic knowledge and/or understanding of concepts.

Application

A question is mapped to Application if in order to answer the question students must either

- select the appropriate tool or
- get the necessary information and “fit” it to the problem.

The category that a question is mapped to may change from Knowledge and Understanding to Application if a context is added or if a tool required to answer the question is not provided.

Thinking

A question is mapped to Thinking if in order to answer the question students must either

- select and sequence a variety of tools or
- demonstrate a critical thinking process (e.g., reasoning).

Students may need to make a plan to answer these questions.

SUGGESTED USES FOR THIS RESOURCE

Here is a suggested list of how the example questions can be used in the classroom:



Use questions without including the answer options. Students can answer the question and then discuss the steps required and other possible answers, including those arrived at through common errors or misconceptions. Discuss whether there are multiple methods that can be used to answer the question. Students can then compare their answer to the given options.



Use technology in the classroom to have students record answers instantly, which will allow for discussion of correct answers and the common errors or misconceptions associated with the incorrect options. The discussion can lead to a deeper understanding of concepts and assist students in correcting their own misconceptions.



Use questions as part of a pre- and post-assessment on a topic to show students their improved understanding within a unit.



Use questions when spiralling as a method to revisit topics.



Encourage students to use manipulatives, and model how to use them effectively. For example, fraction strips or towers can be used with questions mapped to expectations in the Number or Data strand.



Analyze the provincial data for each question and consider how students at each level responded. Consider how the provincial data relates to how your students responded to the question. Review each answer option and how different responses can demonstrate potential strengths and areas for improvement.

QUESTIONS

These released questions are from the mathematics component of the junior-division assessment. This section provides the overall expectation and the category of knowledge and skills for each question.

B. NUMBER

B1. Number Sense

demonstrate an understanding of numbers and make connections to the way numbers are used in everyday life

- 1** Which number represents ninety-two thousand five hundred four?
KU

A 92 054

B 92 504

C 920 504

D 920 054

- 2** Which fraction is equivalent to $\frac{6}{5}$?
AP

A $\frac{5}{4}$

B $\frac{5}{6}$

C $1\frac{1}{5}$

D $1\frac{5}{6}$

B2. Operations

use knowledge of numbers and operations to solve mathematical problems encountered in everyday life

3 What is $5.2 \div 4$?

KU

A 0.77

B 1.3

C 9.2

D 13

4 The cost of one package of seeds is \$0.50.

AP

What is the cost of 100 packages of seeds?

A \$5

B \$50

C \$500

D \$5000

B2. Operations (continued)

5 A field is planted with wheat, oats and corn.

TH

- $\frac{5}{9}$ of the field is planted with wheat
- $\frac{7}{36}$ of the field is planted with oats

Which fraction of the field is planted with corn?

A $\frac{27}{36}$

B $\frac{12}{45}$

C $\frac{2}{27}$

D $\frac{1}{4}$

C. ALGEBRA

C1. Patterns and Relationships

identify, describe, extend, create, and make predictions about a variety of patterns, including those found in real-life contexts

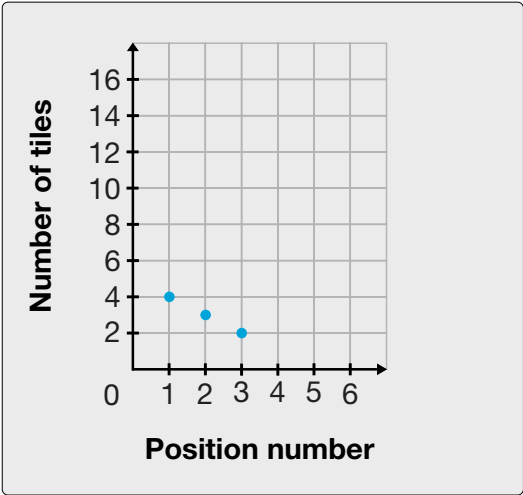
6 A pattern is made using tiles. Information about the pattern is shown in this table of values.

KU

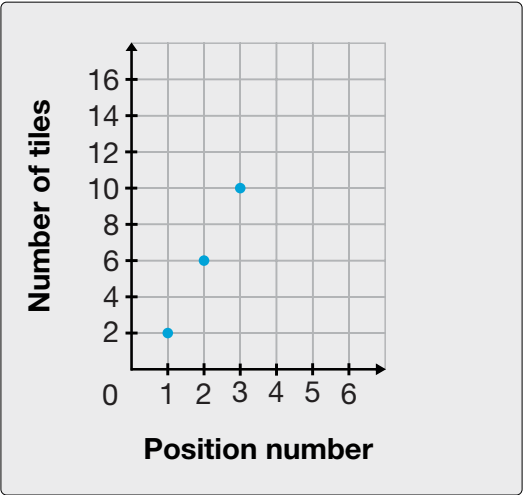
Position number	Number of tiles
1	4
2	8
3	12

Which graph represents the data in this table of values?

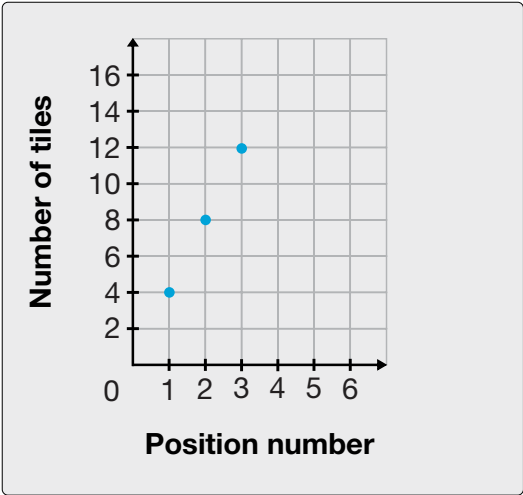
A



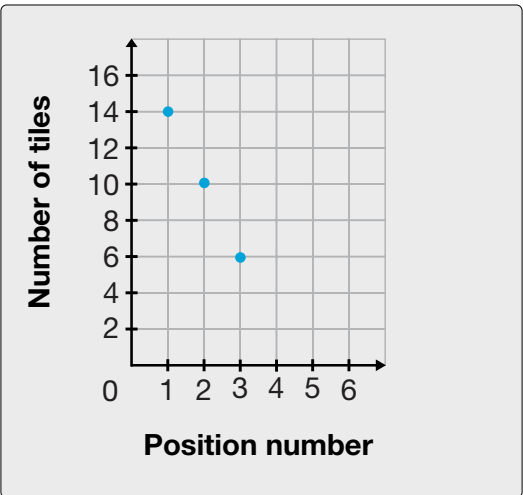
B



C



D



C1. Patterns and Relationships (continued)

7 This table of values shows a growing pattern.
AP

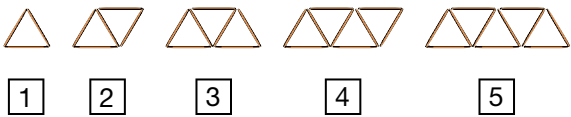
Term number	Term value
1	3
2	7
3	11
4	15

The pattern continues to increase by the same amount each time.

What will the term number be when the term value is 23?

- A 7
- B 6
- C 5
- D 4

8 Toothpicks are used to make this growing pattern.
TH



How many toothpicks are needed to make the figure in position number 25?

- A 13 toothpicks
- B 50 toothpicks
- C 51 toothpicks
- D 75 toothpicks

C2. Equations and Inequalities

demonstrate an understanding of variables, expressions, equalities, and inequalities, and apply this understanding in various contexts

9 What value of k makes this equation true?

KU

$$k - 9 = 4$$

A

2

B

5

C

13

D

36

10 Which statement is true when $x = 4$?

AP

A

$$5x - 8 = 24$$

B

$$5x - 8 > 24$$

C

$$5x - 8 < 24$$

C3. Coding

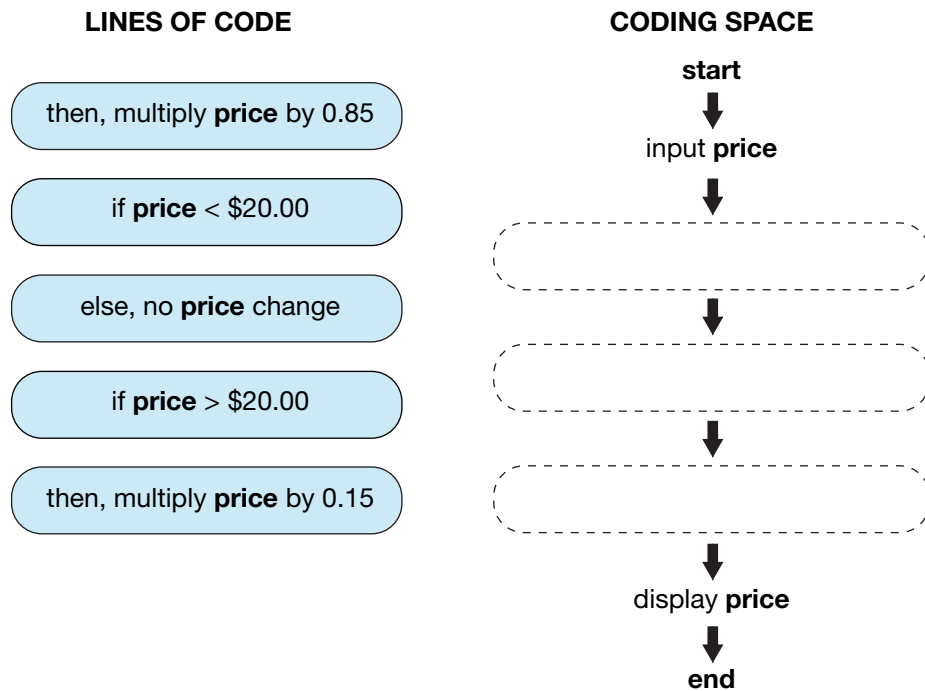
solve problems and create computational representations of mathematical situations using coding concepts and skills

- 11** A store writes code to apply a 15% discount to all items that have a price of more than \$20.00.

AP

Three lines of code are missing.

Drag and drop the three lines of code that complete the code correctly.



C4. Mathematical Modelling

Currently there are no EQAO questions mapped to this overall expectation. There are no specific expectations for this overall expectation.

D. DATA

D1. Data Literacy

manage, analyse, and use data to make convincing arguments and informed decisions, in various contexts drawn from real life

12 A teacher orders new magazines each year.
KU He surveys a sample of students in the school to find out their preferences.

Which of these samples would **best** represent all the students in the school for this survey?

- A 10 students from each class
- B 10 students from one class
- C 10 students in Grade 5
- D 10 students on the soccer team

13 This table represents the number of pages read by students during one week.
AP

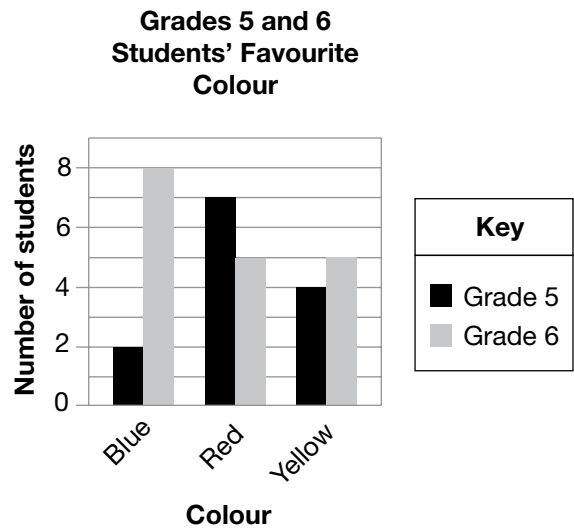
Name	Number of pages read
Zachary	75
Jacob	82
Iman	98
Florence	82
Shannon	63
Anthony	80

What is the **median** number of pages read?

- A 90 pages
- B 82 pages
- C 81 pages
- D 80 pages

D1. Data Literacy (continued)

14 Which statement about this graph is true?
TH



- A There were 16 students in Grade 6 who answered the survey.
- B The colour chosen the most by students who answered the survey was blue.
- C The colour chosen the least by students who answered the survey was yellow.
- D There were more students in Grade 5 than in Grade 6 who answered the survey.

D2. Probability

describe the likelihood that events will happen, and use that information to make predictions

15 **KU** Roger conducts an experiment where he flips a coin ten times and records whether it lands on heads or tails in a table.

He finds that his experimental probability matches the theoretical probability.

Select the table that shows the results from Roger’s experiment.

A

Heads	Tails

B

Heads	Tails

C

Heads	Tails

D

Heads	Tails

16 **AP** A bag has 8 red tiles and 2 purple tiles.

Remi selects a tile from the bag without looking.

What is the probability that Remi selects a red tile from the bag?

- A

0.02
- B

0.08
- C

0.2
- D

0.8

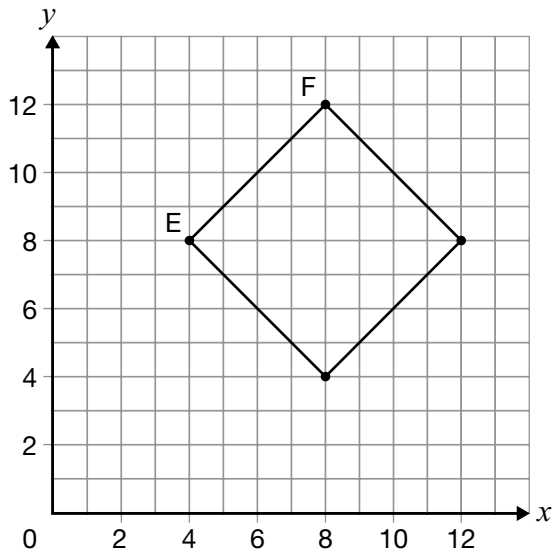
E. SPATIAL SENSE

E1. Geometric and Spatial Reasoning

describe and represent shape, location, and movement by applying geometric properties and spatial relationships in order to navigate the world around them

17 What are the coordinates of vertices E and F?

KU



A E (4, 8) and F (8, 12)

B E (4, 8) and F (12, 8)

C E (8, 4) and F (8, 12)

D E (8, 4) and F (12, 8)

18 Which quadrilateral has rotational symmetry of order 2?

AP

A a kite

B a square

C a dart

D a rectangle

E2. Measurement

compare, estimate, and determine measurements in various contexts

19 How many grams are equal to 7.2 kg?

KU

A 72 000 g

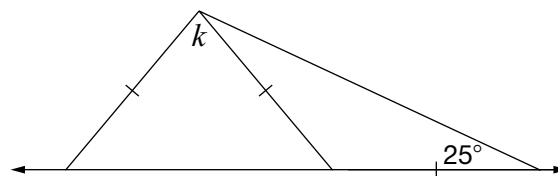
B 7200 g

C 720 g

D 72 g

20 What is the value of k ?

TH



A 50°

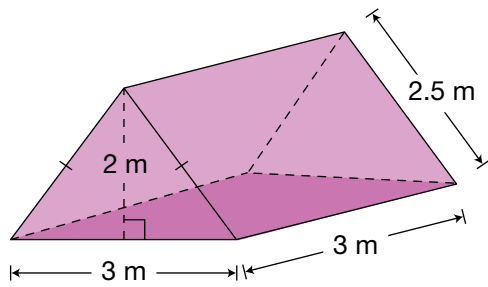
B 65°

C 80°

D 130°

E2. Measurement (continued)

- 21** What is the surface area of this triangle-based prism?
TH



A 10.5 m²

B 21 m²

C 30 m²

D 36 m²

F. FINANCIAL LITERACY

F1. Money and Finances

demonstrate the knowledge and skills needed to make informed financial decisions

22 Select the **TWO** factors that could **interfere**
KU with someone reaching their financial goals.

- A increase in income
- B decrease in income
- C increase in expenses
- D decrease in expenses

F1. Money and Finances (continued)

23 Drag and drop the correct description for each term.
AP

Giving money to a person or business with the expectation that it will be repaid.

Receiving money with an agreement to repay at a later date, often with interest.

Giving money, services or goods as a gift.

Borrowing	Donating	Lending

QUESTIONS WITH ANSWERS AND PROVINCIAL DATA

Sample Data with Observations

In this section, each question is presented with the correct response and its data in a table. This data shows the percentage of students who selected each answer choice by level. The observations that follow each table are provided for consideration as the data in the table is analyzed.

	No Response	A	B	C	D
Below Level 1	4	22	26	26	22
Level 1	1	13	37	29	20
Level 2	0	10	55	22	12
Level 3	0	5	75	14	7
Level 4	0	1	92	4	2

LEGEND			
0–24	25–49	50–79	80–100

The correct answer, option B, was selected by

- 26% of all students who received Below Level 1;
- 37% of all students who received Level 1;
- 55% of all students who received Level 2;
- 75% of all students who received Level 3 and
- 92% of all students who received Level 4.

Among all the students who received a Level 3 on the assessment,

- 75% selected the correct answer, option B;
- 5% selected option A;
- 14% selected option C and
- 7% selected option D.

One of the incorrect answers, option C, was selected by 29% of students who received a Level 1 and 22% of students who received Level 2.

Reminders:

- The percentages in a row for a particular question and a particular level are not provided when the row's sample size is fewer than 49 students.
In these cases, ND (not enough data) is shown.
- The percentages in each row may not add up to 100%, due to rounding.
- The legend provided applies to each table with the data.
- For some of the questions in this resource, the data provided shows the percentage of students whose responses were fully correct, partially correct or incorrect at each achievement level.

Using the Data

There are many things to consider when reviewing the data. It is not possible to know why the students selected the response they did. In a single-selection question with four options, if the percentages in one row (at a specific level) are approximately 25% each, this may demonstrate that many of the students who received the particular level guessed.

QUESTIONS WITH ANSWERS AND PROVINCIAL DATA (continued)

B. NUMBER

B1. Number Sense

demonstrate an understanding of numbers and make connections to the way numbers are used in everyday life

- 1** Which number represents ninety-two thousand five hundred four?
KU

A

92 054

B

92 504

C

920 504

D

920 054

English-Language Schools

	No Response	A	B	C	D
Below Level 1	ND	ND	ND	ND	ND
Level 1	ND	ND	ND	ND	ND
Level 2	0	1	92	6	1
Level 3	0	0	97	3	0
Level 4	0	0	100	0	0

Among students who received this question, 97% who achieved a Level 3 on the assessment and 92% who achieved a Level 2 selected the correct response.

French-Language Schools

	No Response	A	B	C	D
Below Level 1	ND	ND	ND	ND	ND
Level 1	ND	ND	ND	ND	ND
Level 2	0	3	88	7	2
Level 3	0	1	96	3	0
Level 4	0	0	100	0	0

Among students who received this question, 96% who achieved a Level 3 on the assessment and 88% who achieved a Level 2 selected the correct response.

QUESTIONS WITH ANSWERS AND PROVINCIAL DATA (continued)

B1. Number Sense (contiued)

2 Which fraction is equivalent to $\frac{6}{5}$?
AP

A

$$\frac{5}{4}$$

B

$$\frac{5}{6}$$

C

$$1\frac{1}{5}$$

D

$$1\frac{5}{6}$$

English-Language Schools

	No Response	A	B	C	D
Below Level 1	2	14	48	12	25
Level 1	0	8	51	12	29
Level 2	0	15	30	35	20
Level 3	0	9	3	83	5
Level 4	ND	ND	ND	ND	ND

Among students who received this question, 83% who achieved a Level 3 on the assessment, 35% who achieved a Level 2 and 12% who achieved a Level 1 selected the correct response.

French-Language Schools

	No Response	A	B	C	D
Below Level 1	ND	ND	ND	ND	ND
Level 1	1	8	39	19	34
Level 2	0	14	23	41	22
Level 3	0	8	3	87	2
Level 4	ND	ND	ND	ND	ND

Among students who received this question, 87% who achieved a Level 3 on the assessment, 41% who achieved a Level 2 and 19% who achieved a Level 1 selected the correct response.

QUESTIONS WITH ANSWERS AND PROVINCIAL DATA (continued)

B2. Operations

use knowledge of numbers and operations to solve mathematical problems encountered in everyday life

3 What is $5.2 \div 4$?

KU

- A

0.77
- B

1.3
- C

9.2
- D

13

English-Language Schools

	No Response	A	B	C	D
Below Level 1	3	22	37	17	21
Level 1	0	12	65	13	10
Level 2	0	3	93	1	2
Level 3	0	1	99	0	0
Level 4	0	0	100	0	0

Among students who received this question, 99% who achieved a Level 3 on the assessment, 93% who achieved a Level 2 and 65% who achieved a Level 1 selected the correct response.

French-Language Schools

	No Response	A	B	C	D
Below Level 1	ND	ND	ND	ND	ND
Level 1	0	3	86	7	4
Level 2	0	2	96	1	1
Level 3	0	1	99	0	0
Level 4	0	0	100	0	0

Among students who received this question, 99% who achieved a Level 3 on the assessment, 96% who achieved a Level 2 and 86% who achieved a Level 1 selected the correct response.

QUESTIONS WITH ANSWERS AND PROVINCIAL DATA (continued)

B2. Operations (continued)

4 The cost of one package of seeds is \$0.50.

AP What is the cost of 100 packages of seeds?

A \$5

B \$50

C \$500

D \$5000

English-Language Schools

	No Response	A	B	C	D
Below Level 1	1	12	32	33	22
Level 1	0	8	52	28	12
Level 2	0	3	85	7	6
Level 3	0	0	98	1	1
Level 4	ND	ND	ND	ND	ND

Among students who received this question, 98% who achieved a Level 3 on the assessment, 85% who achieved a Level 2 and 52% who achieved a Level 1 selected the correct response.

French-Language Schools

	No Response	A	B	C	D
Below Level 1	ND	ND	ND	ND	ND
Level 1	1	8	49	30	11
Level 2	0	2	86	6	6
Level 3	0	1	99	0	1
Level 4	ND	ND	ND	ND	ND

Among students who received this question, 99% who achieved a Level 3 on the assessment, 86% who achieved a Level 2 and 49% who achieved a Level 1 selected the correct response.

QUESTIONS WITH ANSWERS AND PROVINCIAL DATA (continued)

B2. Operations (continued)

5 A field is planted with wheat, oats and corn.

TH

- $\frac{5}{9}$ of the field is planted with wheat
- $\frac{7}{36}$ of the field is planted with oats

Which fraction of the field is planted with corn?

- A $\frac{27}{36}$
- B $\frac{12}{45}$
- C $\frac{2}{27}$
- D $\frac{1}{4}$

English-Language Schools

	No Response	A	B	C	D
Below Level 1	ND	ND	ND	ND	ND
Level 1	ND	ND	ND	ND	ND
Level 2	0	26	45	15	14
Level 3	0	22	32	8	38
Level 4	0	4	6	1	89

Among students who received this question, 38% who achieved a Level 3 on the assessment and 14% who achieved a Level 2 selected the correct response.

French-Language Schools

	No Response	A	B	C	D
Below Level 1	ND	ND	ND	ND	ND
Level 1	ND	ND	ND	ND	ND
Level 2	0	30	34	16	19
Level 3	0	20	23	7	50
Level 4	0	3	4	1	92

Among students who received this question, 50% who achieved a Level 3 on the assessment and 19% who achieved a Level 2 selected the correct response.

QUESTIONS WITH ANSWERS AND PROVINCIAL DATA (continued)

C. ALGEBRA

C1. Patterns and Relationships

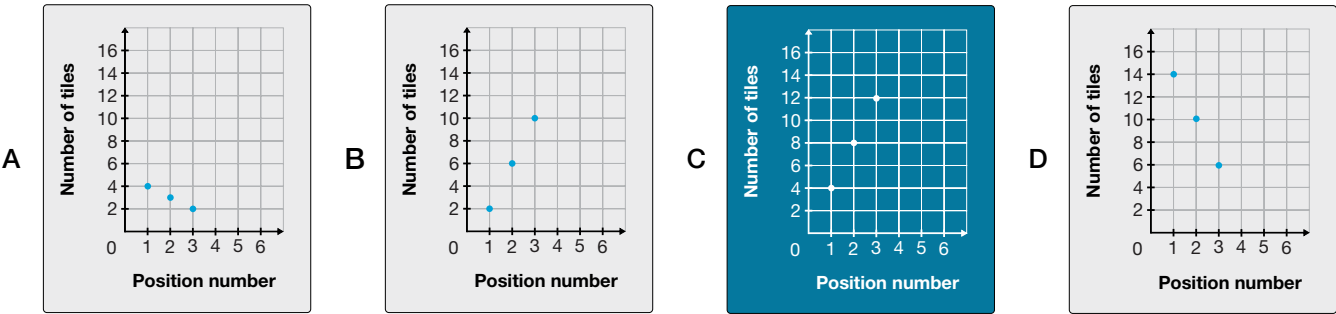
identify, describe, extend, create, and make predictions about a variety of patterns, including those found in real-life contexts

6 A pattern is made using tiles. Information about the pattern is shown in this table of values.

KU

Position number	Number of tiles
1	4
2	8
3	12

Which graph represents the data in this table of values?



English-Language Schools

	No Response	A	B	C	D
Below Level 1	4	28	32	17	20
Level 1	1	21	27	36	15
Level 2	0	6	9	81	4
Level 3	0	0	1	98	0
Level 4	ND	ND	ND	ND	ND

Among students who received this question, 98% who achieved a Level 3 on the assessment, 81% who achieved a Level 2 and 36% who achieved a Level 1 selected the correct response.

French-Language Schools

	No Response	A	B	C	D
Below Level 1	ND	ND	ND	ND	ND
Level 1	1	15	20	51	14
Level 2	0	4	7	85	4
Level 3	0	0	4	96	0
Level 4	ND	ND	ND	ND	ND

Among students who received this question, 96% who achieved a Level 3 on the assessment, 85% who achieved a Level 2 and 51% who achieved a Level 1 selected the correct response.

QUESTIONS WITH ANSWERS AND PROVINCIAL DATA (continued)

C1. Patterns and Relationships (continued)

7 This table of values shows a growing pattern.

AP

Term number	Term value
1	3
2	7
3	11
4	15

The pattern continues to increase by the same amount each time.

What will the term number be when the term value is 23?

- A
- B
- C
- D

English-Language Schools

	No Response	A	B	C	D
Below Level 1	ND	ND	ND	ND	ND
Level 1	ND	ND	ND	ND	ND
Level 2	0	11	70	5	13
Level 3	0	4	92	2	3
Level 4	0	1	99	1	0

Among students who received this question, 92% who achieved a Level 3 on the assessment and 70% who achieved a Level 2 selected the correct response.

French-Language Schools

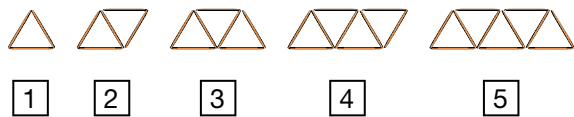
	No Response	A	B	C	D
Below Level 1	ND	ND	ND	ND	ND
Level 1	ND	ND	ND	ND	ND
Level 2	0	13	65	6	17
Level 3	0	5	88	3	4
Level 4	0	1	98	1	1

Among students who received this question, 88% who achieved a Level 3 on the assessment and 65% who achieved a Level 2 selected the correct response.

QUESTIONS WITH ANSWERS AND PROVINCIAL DATA (continued)

C1. Patterns and Relationships (continued)

8 Toothpicks are used to make this growing pattern.
TH



How many toothpicks are needed to make the figure in position number 25?

- A 13 toothpicks
- B 50 toothpicks
- C 51 toothpicks
- D 75 toothpicks

English-Language Schools

	No Response	A	B	C	D
Below Level 1	ND	ND	ND	ND	ND
Level 1	ND	ND	ND	ND	ND
Level 2	0	8	31	20	40
Level 3	0	2	19	46	32
Level 4	0	1	4	88	7

Among students who received this question, 46% who achieved a Level 3 on the assessment and 20% who achieved a Level 2 selected the correct response.

French-Language Schools

	No Response	A	B	C	D
Below Level 1	ND	ND	ND	ND	ND
Level 1	ND	ND	ND	ND	ND
Level 2	0	5	44	15	36
Level 3	0	3	24	45	28
Level 4	0	0	4	84	12

Among students who received this question, 45% who achieved a Level 3 on the assessment and 15% who achieved a Level 2 selected the correct response.

QUESTIONS WITH ANSWERS AND PROVINCIAL DATA (continued)

C2. Equations and Inequalities

demonstrate an understanding of variables, expressions, equalities, and inequalities, and apply this understanding in various contexts

9 What value of k makes this equation true?

KU

$$k - 9 = 4$$

- A

2
- B

5
- C

13
- D

36

English-Language Schools

	No Response	A	B	C	D
Below Level 1	2	11	42	23	23
Level 1	0	8	53	29	10
Level 2	0	1	57	40	2
Level 3	0	0	29	71	0
Level 4	ND	ND	ND	ND	ND

Among students who received this question, 71% who achieved a Level 3 on the assessment, 40% who achieved a Level 2 and 29% who achieved a Level 1 selected the correct response.

French-Language Schools

	No Response	A	B	C	D
Below Level 1	ND	ND	ND	ND	ND
Level 1	0	5	60	33	3
Level 2	0	1	56	42	0
Level 3	ND	ND	ND	ND	ND
Level 4	ND	ND	ND	ND	ND

Among students who received this question, 42% who achieved a Level 2 on the assessment and 33% who achieved a Level 1 selected the correct response.

QUESTIONS WITH ANSWERS AND PROVINCIAL DATA (continued)

C2. Equations and Inequalities (continued)

10 Which statement is true when $x = 4$?

AP

A $5x - 8 = 24$

B $5x - 8 > 24$

C $5x - 8 < 24$

English-Language Schools

	No Response	A	B	C
Below Level 1	4	42	34	21
Level 1	0	40	35	25
Level 2	0	23	39	38
Level 3	0	5	34	61
Level 4	ND	ND	ND	ND

Among students who received this question, 61% who achieved a Level 3 on the assessment, 38% who achieved a Level 2 and 25% who achieved a Level 1 selected the correct response.

French-Language Schools

	No Response	A	B	C
Below Level 1	ND	ND	ND	ND
Level 1	0	31	34	35
Level 2	0	16	44	40
Level 3	0	3	32	64
Level 4	ND	ND	ND	ND

Among students who received this question, 64% who achieved a Level 3 on the assessment, 40% who achieved a Level 2 and 35% who achieved a Level 1 selected the correct response.

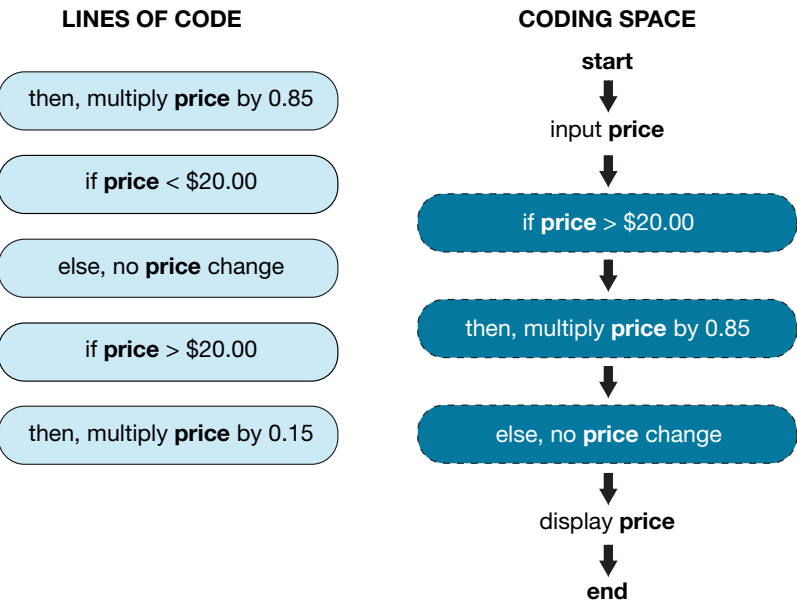
QUESTIONS WITH ANSWERS AND PROVINCIAL DATA (continued)

C3. Coding

solve problems and create computational representations of mathematical situations using coding concepts and skills

11 A store writes code to apply a 15% discount to all items that have a price of more than \$20.00.
AP Three lines of code are missing.

Drag and drop the three lines of code that complete the code correctly.



QUESTIONS WITH ANSWERS AND PROVINCIAL DATA (continued)

D. DATA

D1. Data Literacy

manage, analyse, and use data to make convincing arguments and informed decisions, in various contexts drawn from real life

- 12** A teacher orders new magazines each year.
KU He surveys a sample of students in the school to find out their preferences.

Which of these samples would **best** represent all the students in the school for this survey?

A 10 students from each class

B 10 students from one class

C 10 students in Grade 5

D 10 students on the soccer team

English-Language Schools

	No Response	A	B	C	D
Below Level 1	1	30	26	20	23
Level 1	0	47	22	15	16
Level 2	0	78	11	6	5
Level 3	0	93	4	2	1
Level 4	ND	ND	ND	ND	ND

Among students who received this question, 93% who achieved a Level 3 on the assessment, 78% who achieved a Level 2 and 47% who achieved a Level 1 selected the correct response.

French-Language Schools

	No Response	A	B	C	D
Below Level 1	ND	ND	ND	ND	ND
Level 1	0	38	29	20	13
Level 2	0	71	14	8	6
Level 3	0	93	3	3	1
Level 4	ND	ND	ND	ND	ND

Among students who received this question, 93% who achieved a Level 3 on the assessment, 71% who achieved a Level 2 and 38% who achieved a Level 1 selected the correct response.

QUESTIONS WITH ANSWERS AND PROVINCIAL DATA (continued)

D1. Data Literacy (continued)

13 This table represents the number of pages read by students during one week.

AP

Name	Number of pages read
Zachary	75
Jacob	82
Iman	98
Florence	82
Shannon	63
Anthony	80

What is the **median** number of pages read?

A 90 pages

B 82 pages

C 81 pages

D 80 pages

English-Language Schools

	No Response	A	B	C	D
Below Level 1	ND	ND	ND	ND	ND
Level 1	ND	ND	ND	ND	ND
Level 2	0	11	52	17	19
Level 3	0	10	33	37	20
Level 4	0	4	8	80	8

Among students who received this question, 37% who achieved a Level 3 on the assessment and 17% who achieved a Level 2 selected the correct response.

French-Language Schools

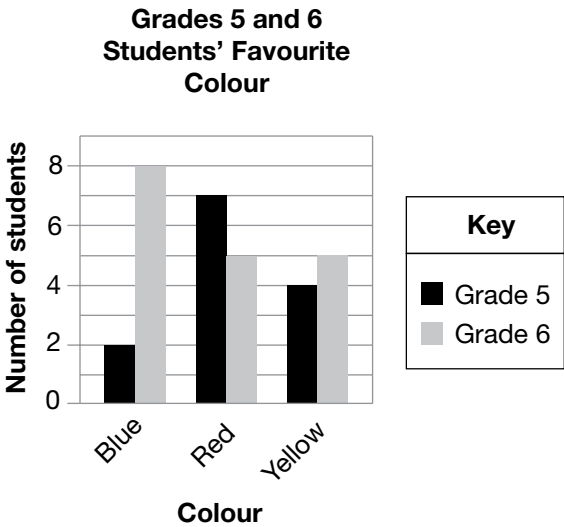
	No Response	A	B	C	D
Below Level 1	ND	ND	ND	ND	ND
Level 1	ND	ND	ND	ND	ND
Level 2	0	13	46	20	21
Level 3	0	12	22	45	22
Level 4	0	5	4	84	7

Among students who received this question, 45% who achieved a Level 3 on the assessment and 20% who achieved a Level 2 selected the correct response.

QUESTIONS WITH ANSWERS AND PROVINCIAL DATA (continued)

D1. Data Literacy (continued)

14 Which statement about this graph is true?
TH



- A** There were 16 students in Grade 6 who answered the survey.
- B** The colour chosen the most by students who answered the survey was blue.
- C** The colour chosen the least by students who answered the survey was yellow.
- D** There were more students in Grade 5 than in Grade 6 who answered the survey.

English-Language Schools

	No Response	A	B	C	D
Below Level 1	6	31	39	11	13
Level 1	1	26	43	15	15
Level 2	0	9	32	48	10
Level 3	0	2	8	86	4
Level 4	0	1	1	98	1

Among students who received this question, 86% who achieved a Level 3 on the assessment, 48% who achieved a Level 2 and 15% who achieved a Level 1 selected the correct response.

French-Language Schools

	No Response	A	B	C	D
Below Level 1	ND	ND	ND	ND	ND
Level 1	0	23	43	16	19
Level 2	0	9	22	61	7
Level 3	0	3	6	88	3
Level 4	0	1	1	97	1

Among students who received this question, 88% who achieved a Level 3 on the assessment, 61% who achieved a Level 2 and 16% who achieved a Level 1 selected the correct response.

QUESTIONS WITH ANSWERS AND PROVINCIAL DATA (continued)

D2. Probability

describe the likelihood that events will happen, and use that information to make predictions

15 Roger conducts an experiment where he flips a coin ten times and records whether it lands on heads or tails in a table.

KU

He finds that his experimental probability matches the theoretical probability.

Select the table that shows the results from Roger’s experiment.

A

Heads	Tails

B

Heads	Tails

C

Heads	Tails

D

Heads	Tails

English-Language Schools

	No Response	A	B	C	D
Below Level 1	2	33	32	17	16
Level 1	1	31	44	11	13
Level 2	0	24	66	6	4
Level 3	0	10	88	2	1
Level 4	ND	ND	ND	ND	ND

Among students who received this question, 88% who achieved a Level 3 on the assessment, 66% who achieved a Level 2 and 44% who achieved a Level 1 selected the correct response.

French-Language Schools

	No Response	A	B	C	D
Below Level 1	ND	ND	ND	ND	ND
Level 1	1	29	31	20	19
Level 2	0	28	57	6	9
Level 3	ND	ND	ND	ND	ND
Level 4	ND	ND	ND	ND	ND

Among students who received this question, 57% who achieved a Level 2 and 31% who achieved a Level 1 selected the correct response.

QUESTIONS WITH ANSWERS AND PROVINCIAL DATA (continued)

D2. Probability (continued)

16 A bag has 8 red tiles and 2 purple tiles.

AP Remi selects a tile from the bag without looking.

What is the probability that Remi selects a red tile from the bag?

A 0.02

B 0.08

C 0.2

D 0.8

English-Language Schools

	No Response	A	B	C	D
Below Level 1	2	20	51	9	19
Level 1	1	12	41	13	34
Level 2	0	4	18	12	66
Level 3	0	0	6	9	85
Level 4	ND	ND	ND	ND	ND

Among students who received this question, 85% who achieved a Level 3 on the assessment, 66% who achieved a Level 2 and 34% who achieved a Level 1 selected the correct response.

French-Language Schools

	No Response	A	B	C	D
Below Level 1	ND	ND	ND	ND	ND
Level 1	2	16	35	10	37
Level 2	0	9	16	13	62
Level 3	ND	ND	ND	ND	ND
Level 4	ND	ND	ND	ND	ND

Among students who received this question, 62% who achieved a Level 2 and 37% who achieved a Level 1 selected the correct response.

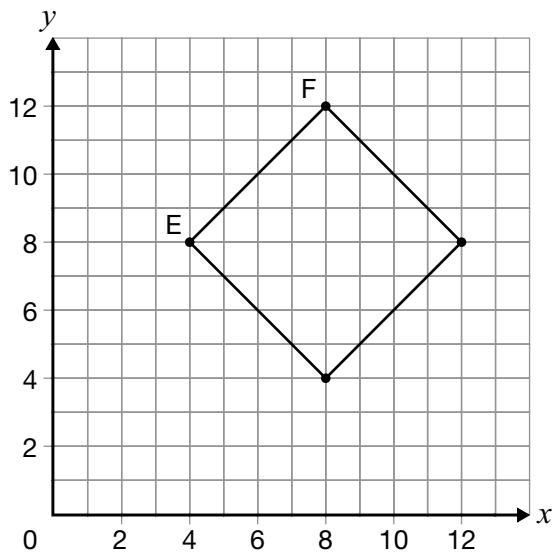
QUESTIONS WITH ANSWERS AND PROVINCIAL DATA (continued)

E. SPATIAL SENSE

E1. Geometric and Spatial Reasoning

describe and represent shape, location, and movement by applying geometric properties and spatial relationships in order to navigate the world around them

17 What are the coordinates of vertices E and F?
KU



- A E (4, 8) and F (8, 12)
- B E (4, 8) and F (12, 8)
- C E (8, 4) and F (8, 12)
- D E (8, 4) and F (12, 8)

English-Language Schools

	No Response	A	B	C	D
Below Level 1	2	32	37	9	20
Level 1	1	39	25	15	20
Level 2	0	59	12	9	20
Level 3	0	83	1	3	13
Level 4	ND	ND	ND	ND	ND

Among students who received this question, 83% who achieved a Level 3 on the assessment, 59% who achieved a Level 2 and 39% who achieved a Level 1 selected the correct response.

French-Language Schools

	No Response	A	B	C	D
Below Level 1	ND	ND	ND	ND	ND
Level 1	0	37	31	8	24
Level 2	0	71	5	8	16
Level 3	0	91	1	0	7
Level 4	ND	ND	ND	ND	ND

Among students who received this question, 91% who achieved a Level 3 on the assessment, 71% who achieved a Level 2 and 37% who achieved a Level 1 selected the correct response.

QUESTIONS WITH ANSWERS AND PROVINCIAL DATA (continued)

E1. Geometric and Spatial Reasoning (continued)

18 Which quadrilateral has rotational symmetry of order 2?
AP

A

a kite

B

a square

C

a dart

D

a rectangle

English-Language Schools

	No Response	A	B	C	D
Below Level 1	2	28	26	19	25
Level 1	0	28	27	23	22
Level 2	0	33	29	14	23
Level 3	0	28	23	8	40
Level 4	0	16	11	5	68

Among students who received this question, 40% who achieved a Level 3 on the assessment, 23% who achieved a Level 2 and 22% who achieved a Level 1 selected the correct response.

French-Language Schools

	No Response	A	B	C	D
Below Level 1	ND	ND	ND	ND	ND
Level 1	0	38	28	20	14
Level 2	0	29	33	18	20
Level 3	0	27	32	12	29
Level 4	0	14	29	7	50

Among students who received this question, 29% who achieved a Level 3 on the assessment, 20% who achieved a Level 2 and 14% who achieved a Level 1 selected the correct response.

QUESTIONS WITH ANSWERS AND PROVINCIAL DATA (continued)

E2. Measurement

compare, estimate, and determine measurements in various contexts

19 How many grams are equal to 7.2 kg?

KU

A 72 000 g

B 7200 g

C 720 g

D 72 g

English-Language Schools

	No Response	A	B	C	D
Below Level 1	2	23	28	16	31
Level 1	0	18	29	21	32
Level 2	0	18	51	16	14
Level 3	0	10	77	8	4
Level 4	ND	ND	ND	ND	ND

Among students who received this question, 77% who achieved a Level 3 on the assessment, 51% who achieved a Level 2 and 29% who achieved a Level 1 selected the correct response.

French-Language Schools

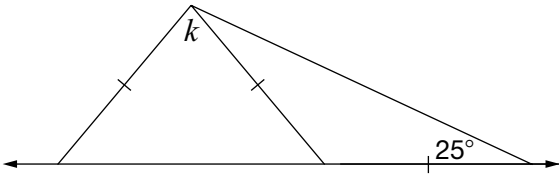
	No Response	A	B	C	D
Below Level 1	ND	ND	ND	ND	ND
Level 1	0	16	32	22	29
Level 2	0	15	59	13	13
Level 3	0	7	87	6	1
Level 4	ND	ND	ND	ND	ND

Among students who received this question, 87% who achieved a Level 3 on the assessment, 59% who achieved a Level 2 and 32% who achieved a Level 1 selected the correct response.

QUESTIONS WITH ANSWERS AND PROVINCIAL DATA (continued)

E2. Measurement (continued)

20 What is the value of k ?
TH



- A 50°
- B 65°
- C 80°
- D 130°

English-Language Schools

	No Response	A	B	C	D
Below Level 1	1	32	40	9	19
Level 1	1	40	31	15	13
Level 2	0	34	31	21	13
Level 3	0	20	28	36	15
Level 4	0	8	13	70	8

Among students who received this question, 36% who achieved a Level 3 on the assessment, 21% who achieved a Level 2 and 15% who achieved a Level 1 selected the correct response.

French-Language Schools

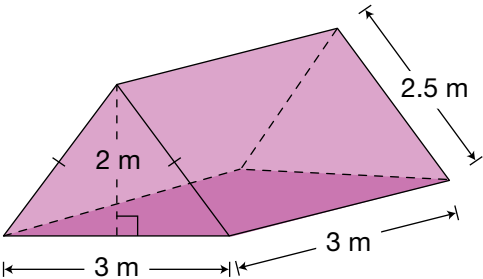
	No Response	A	B	C	D
Below Level 1	ND	ND	ND	ND	ND
Level 1	0	43	36	13	7
Level 2	0	31	30	26	12
Level 3	0	18	24	43	15
Level 4	0	6	7	78	9

Among students who received this question, 43% who achieved a Level 3 on the assessment, 26% who achieved a Level 2 and 13% who achieved a Level 1 selected the correct response.

QUESTIONS WITH ANSWERS AND PROVINCIAL DATA (continued)

E2. Measurement (continued)

21 What is the surface area of this triangle-based prism?
TH



- A 10.5 m²
- B 21 m²
- C 30 m²
- D 36 m²

English-Language Schools

	No Response	A	B	C	D
Below Level 1	ND	ND	ND	ND	ND
Level 1	ND	ND	ND	ND	ND
Level 2	0	36	27	18	19
Level 3	0	16	22	40	21
Level 4	0	2	5	87	6

Among students who received this question, 40% who achieved a Level 3 on the assessment and 18% who achieved a Level 2 selected the correct response.

French-Language Schools

	No Response	A	B	C	D
Below Level 1	ND	ND	ND	ND	ND
Level 1	ND	ND	ND	ND	ND
Level 2	0	32	27	22	18
Level 3	0	18	25	38	20
Level 4	0	2	5	86	8

Among students who received this question, 38% who achieved a Level 3 on the assessment and 22% who achieved a Level 2 selected the correct response.

QUESTIONS WITH ANSWERS AND PROVINCIAL DATA (continued)

F. FINANCIAL LITERACY

F1. Money and Finances

demonstrate the knowledge and skills needed to make informed financial decisions

22 Select the **TWO** factors that could **interfere**
KU with someone reaching their financial goals.

- A increase in income
- B decrease in income
- C increase in expenses
- D decrease in expenses

English-Language Schools

	No Response	Fully Correct (B and C)	Partially Correct (B)	Partially Correct (C)	Fully Incorrect
Below Level 1	1	13	22	24	39
Level 1	0	21	22	25	32
Level 2	0	49	10	21	20
Level 3	0	77	4	10	9
Level 4	0	93	1	3	2

Among students who received this question, 77% who achieved a Level 3 on the assessment, 49% who achieved a Level 2 and 21% who achieved a Level 1 selected the correct response.

French-Language Schools

	No Response	Fully Correct (B and C)	Partially Correct (B)	Partially Correct (C)	Fully Incorrect
Below Level 1	ND	ND	ND	ND	ND
Level 1	0	27	17	25	31
Level 2	0	35	12	26	27
Level 3	0	62	6	16	16
Level 4	0	89	0	7	4

Among students who received this question, 62% who achieved a Level 3 on the assessment, 35% who achieved a Level 2 and 27% who achieved a Level 1 selected the correct response.

QUESTIONS WITH ANSWERS AND PROVINCIAL DATA (continued)

F1. Money and Finances (continued)

23 Drag and drop the correct description for each term.

AP

Giving money to a person or business with the expectation that it will be repaid.

Receiving money with an agreement to repay at a later date, often with interest.

Giving money, services or goods as a gift.

Borrowing	Donating	Lending
Receiving money with an agreement to repay at a later date, often with interest.	Giving money, services or goods as a gift.	Giving money to a person or business with the expectation that it will be repaid.

English-Language Schools

	No Response	All Three Correct	One or Two Correct	None Correct
Below Level 1	3	21	43	34
Level 1	0	46	43	11
Level 2	0	72	26	1
Level 3	0	83	17	0
Level 4	0	91	9	0

Among students who received this question, 83% who achieved a Level 3 on the assessment, 72% who achieved a Level 2 and 46% who achieved a Level 1 selected the correct response.

French-Language Schools

	No Response	All Three Correct	One or Two Correct	None Correct
Below Level 1	ND	ND	ND	ND
Level 1	0	33	45	22
Level 2	0	52	42	6
Level 3	0	70	28	2
Level 4	0	85	14	1

Among students who received this question, 70% who achieved a Level 3 on the assessment, 52% who achieved a Level 2 and 33% who achieved a Level 1 selected the correct response.

