EQAO

Education
Quality and
Accountability
Office

Grade 6 Assessment of Reading, Writing and Mathematics, Spring 2006

Student Booklet: Mathematics

Scoring Guide

Code	Description
B	Blank – nothing written or drawn in response
I	Illegible, Irrelevant, Off Topic
10	Problem-solving process of comparing and ordering fractional amounts shows limited effectiveness due to: • minimal evidence of a solution process • limited identification of important elements of the problem • too much emphasis on unimportant elements of the problem • no conclusions presented • conclusion presented without supporting evidence
20	Problem-solving process of comparing and ordering fractional amounts shows some effectiveness due to: • an incomplete solution process • identification of some of the important elements of the problem • some understanding of the relationships between important elements of the problem • simple conclusions with little supporting evidence
30	Problem-solving process of comparing and ordering fractional amounts shows considerable effectiveness due to : • a solution process that is nearly complete • identification of most of the important elements of the problem • a considerable understanding of the relationships between important elements of the problem • appropriate conclusions with supporting evidence
40	Problem-solving process of comparing and ordering fractional amounts shows a high degree of effectiveness due to : • a complete solution process • identification of all important elements of the problem • a thorough understanding of the relationships between all of the important elements of the problem • appropriate conclusions with thorough and insightful supporting evidence

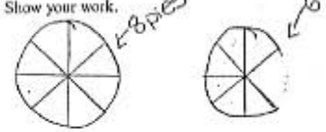
Question 8 Code 10

Pie is served at a picnic. Each pie is made up of 6 equal pieces. Bradley records the number of pieces each person eats in the table below.

Name	Gurleen	Max	Ta-Shanya	Stewart	Brianne	Adrian
Number of Pieces Eaten	3	2	2	3	3	1

How many pies are eaten in total? Express your answer as a fraction.

Show your work.



I added all the numbers of eaten pie, then I made a pie of 8 pieces I added 3+3+2=8 then I added the rest of numbers 3+3+1=6 So I made a pie of 6 then I counted all the piece of pie in total and what part of the pie was eaten.

They eat $\frac{6}{14}$ pies.

Rationale :

- Limited identification of important elements of the problem
- Misunderstanding of 6 equal pieces; uses pie with 8 equal pieces

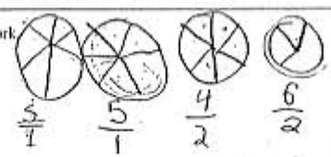
Question 8 Code 10

Pie is served at a picnic. Each pie is made up of 6 equal pieces. Bradley records the number of pieces each person eats in the table below.

Name	Gurleen	Max	Ta-Shanya	Stewart	Brianne	Adrian
Number of Pieces Eaten	3	2	2	3	3	1

How many pies are eaten in total? Express your answer as a fraction.

Show your work.



They eat 3 pies.

Rationale :

- Limited identification of important elements of the problem- lists incorrect fraction
- Conclusion presented is not supported by the work shown

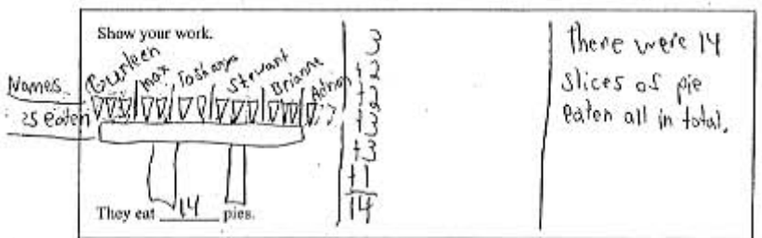
Question 8 Code 20

8 Pie is served at a picnic. Each pie is made up of 6 equal pieces. Bradley records the number of pieces each person eats in the table below.

Name	Gurleen	Max	Ta-Shanya	Stewart	Brianne	Adrian
Number of Pieces Eaten	3	2	2	3	3	1

How many pies are eaten in total? Express your answer as a fraction.

Show your work.



They eat 14 pies.

Rationale :

- Some understanding of the relationship between important elements of the problem
- Added all of the pieces but cannot relate them to parts of a whole

Question 8 Code 20

Pie is served at a picnic. Each pie is made up of 6 equal pieces. Bradley records the number of pieces each person eats in the table below.

Name	Gurleen	Max	Ta-Shanya	Stewart	Brianne	Adrian
Number of Pieces Eaten	3	2	2	3	3	1

How many pies are eaten in total? Express your answer as a fraction.

Show your work.

3+2+2+3+3+1=14

They eat 22 pies.

Rationale :

- Incomplete solution process
- Conclusion presented with little supporting evidence-work shown does not reflect final statement

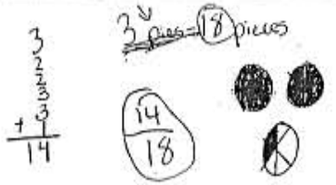
Question 8 Code 30

Pie is served at a picnic. Each pie is made up of 6 equal pieces. Bradley records the number of pieces each person eats in the table below.

Name	Gurleen	Max	Ta-Shanya	Stewart	Brianne	Adrian
Number of Pieces Eaten	3	2	2	3	3	1

How many pies are eaten in total? Express your answer as a fraction.

Show your work.



They eat $\frac{14}{18}$ pies.

Rationale :

- Identification of most of the important elements of the problem
- Does not identify 1 pie (6 pieces) as the whole. Uses 18 pieces as the whole.

Question 8 Code 30

Pie is served at a picnic. Each pie is made up of 6 equal pieces. Bradley records the number of pieces each person eats in the table below.

Name	Gurleen	Max	Ta-Shanya	Stewart	Brianne	Adrian
Number of Pieces Eaten	3	2	2	3	3	1

How many pies are eaten in total? Express your answer as a fraction.

Show your work. 3+2+2+3+3+1=14

They eat 2.2 pies

They eat 2.2 pies.

Rationale :

- A solution process that is nearly complete
- Demonstrates a considerable understanding of the relationships between important elements of the problem- cannot convert from decimal to a fraction

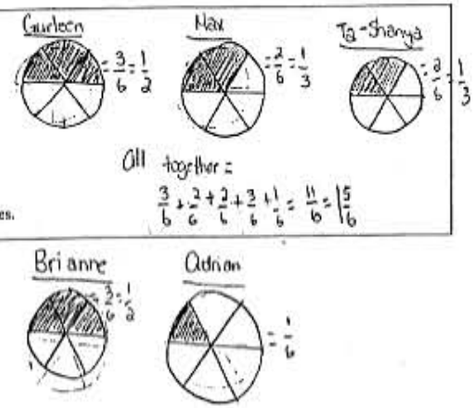
Question 8 Code 30

Pie is served at a picnic. Each pie is made up of 6 equal pieces. Bradley records the number of pieces each person eats in the table below.

Name	Gurleen	Max	Ta-Shanya	Stewart	Brianne	Adrian
Number of Pieces Eaten	3	2	2	3	3	1

How many pies are eaten in total? Express your answer as a fraction.

Show your work.



They eat $1\frac{5}{6}$ pies.

Rationale :

- A solution process that is nearly complete
- Appropriate conclusion for the work shown- omitted one student

Code	Description
B	Blank – nothing written or drawn in response
I	Illegible, Irrelevant, Off Topic
10	Problem-solving process of comparing and ordering fractional amounts shows limited effectiveness due to: • minimal evidence of a solution process • limited identification of important elements of the problem • too much emphasis on unimportant elements of the problem • no conclusions presented • conclusion presented without supporting evidence
20	Problem-solving process of comparing and ordering fractional amounts shows some effectiveness due to: • an incomplete solution process • identification of some of the important elements of the problem • some understanding of the relationships between important elements of the problem • simple conclusions with little supporting evidence
30	Problem-solving process of comparing and ordering fractional amounts shows considerable effectiveness due to : • a solution process that is nearly complete • identification of most of the important elements of the problem • a considerable understanding of the relationships between important elements of the problem • appropriate conclusions with supporting evidence
40	Problem-solving process of comparing and ordering fractional amounts shows a high degree of effectiveness due to : • a complete solution process • identification of all important elements of the problem • a thorough understanding of the relationships between all of the important elements of the problem • appropriate conclusions with thorough and insightful supporting evidence

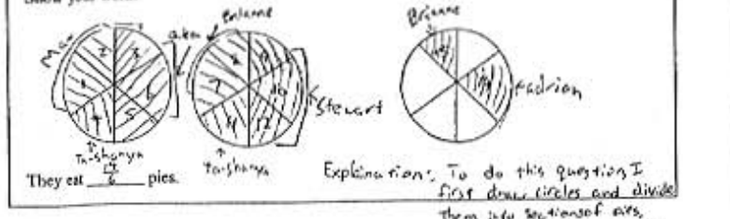
Question 8 — Code 40

Pie is served at a picnic. Each pie is made up of 6 equal pieces. Bradley records the number of pieces each person eats in the table below.

Name	Gurleen	Max	Ta-Shanya	Stewart	Brianne	Adrian
Number of Pieces Eaten	3	2	2	3	3	1

How many pies are eaten in total? Express your answer as a fraction.

Show your work.



They eat 14/6 pies.

Explanation: To do this question I first drew circles and divide them into sections of 6's. I then shade them and like how much pieces each person ate on that pies, for example Adrian I shade in 1 piece and lable it Adr's After that is done I count the number of piece I got 14 pieces. Since each pie is divide into 6 pieces the denominator would be 6 and the numerator would be 14.

Rationale :

- A complete solution process
- Appropriate conclusions with thorough and insightful supporting evidence- correctly determines that 14/6 pies are eaten in total

Question 8 — Code 40

Pie is served at a picnic. Each pie is made up of 6 equal pieces. Bradley records the number of pieces each person eats in the table below.

Name	Gurleen	Max	Ta-Shanya	Stewart	Brianne	Adrian
Number of Pieces Eaten	3 A	2	2 B	3 C	3 D	1 E

How many pies are eaten in total? Express your answer as a fraction.

Show your work. 3+3=6=1 pie
3+2+1=6=1 pie
2=1 quarter pie

$2\frac{2}{6}$

I know this because when you add all the numbers together to get six, you get 2 sets that add to six and 1 that doesn't. So I took the two that add to 6 and then found the last one was $\frac{2}{6}$ so it was $2\frac{2}{6}$.

They eat $2\frac{2}{6}$ pies.

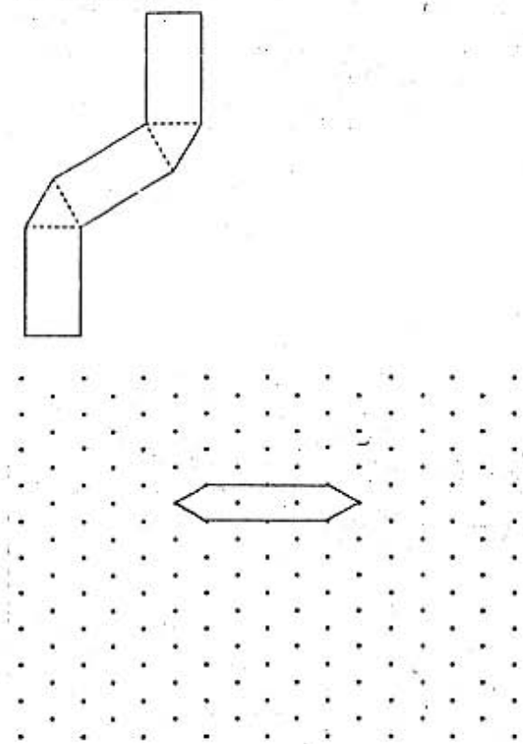
Rationale :

- A complete solution process
- Appropriate conclusions with thorough and insightful supporting evidence- correctly determines that $2\,^{2/6}$ of pies are eaten in total

Code	Description
B	Blank – nothing written or drawn in response
I	Illegible, Irrelevant, Off Topic
10	Application of knowledge and skills of drawing three-dimensional figures shows limited effectiveness due to • misunderstanding of concepts • incorrect selection or misuse of procedures.
20	Application of knowledge and skills of drawing three-dimensional figures shows some effectiveness due • a partial understanding of concepts • errors and/or omissions in the application of procedures.
30	Application of knowledge and skills of drawing three-dimensional figures shows considerable effectiveness due to • an understanding of most concepts • minor errors and/or omissions in the application of the procedures.
40	Application of knowledge and skills of drawing three-dimensional figures shows a high degree of effectiveness due to • a thorough understanding of the concepts • an accurate application of the procedures. • i.e. student draws an appropriate three-dimensional figure with appropriate size and shape (minor errors do not detract from a thorough understanding).

Question 9 Code 10

Draw the three-dimensional figure that will be created when the following net is folded. Show all vertices and edges.

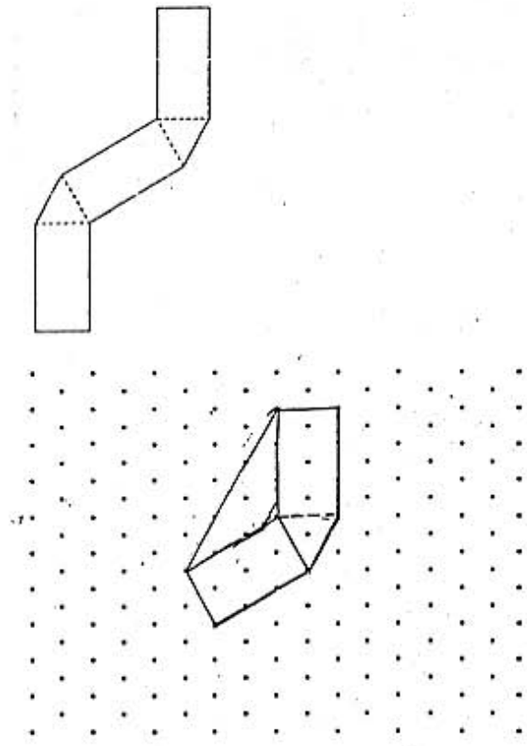


Rationale :

- Application of knowledge and skills of drawing 3D figures shows limited effectiveness
- No attempt at 3D

Question 9 Code 10

Draw the three-dimensional figure that will be created when the following net is folded. Show all vertices and edges.

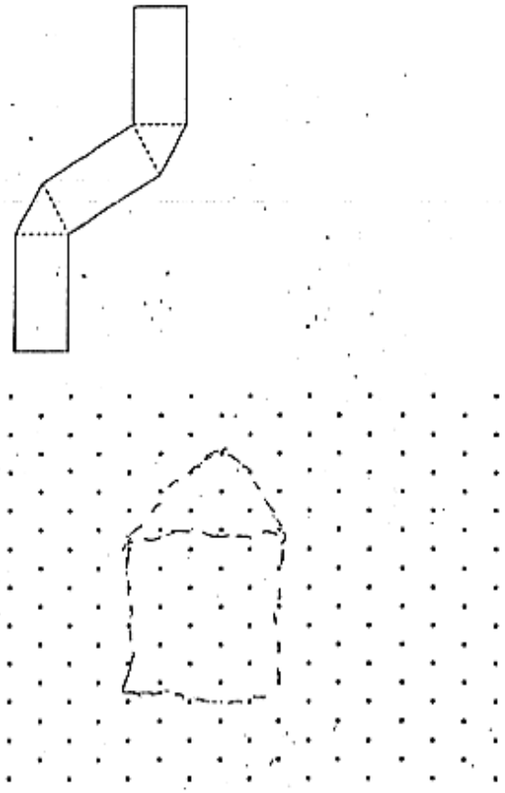


Rationale :

- Application of knowledge and skills of drawing 3D figures shows limited effectiveness
- Incorrect drawing of 3D figure e.g. cube rectangular prism, irregular shapes

Question 9 Code 20

. Draw the three-dimensional figure that will be created when the following net is folded. Show all vertices and edges.

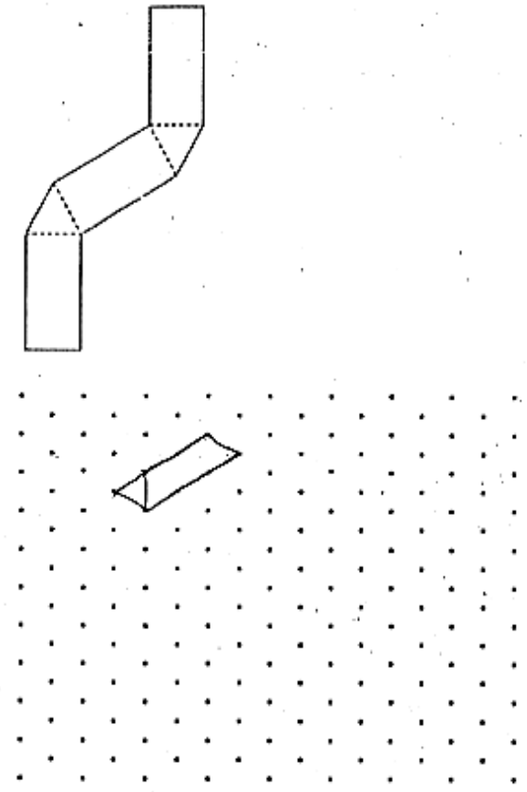


Rationale :

- Application of knowledge and skills of drawing 3D figures shows some effectiveness
- Errors and omissions in the application of the procedures- does not show hidden edges
- Incorrect use of isometric dot paper

Question 9 Code 20

. Draw the three-dimensional figure that will be created when the following net is folded. Show all vertices and edges.

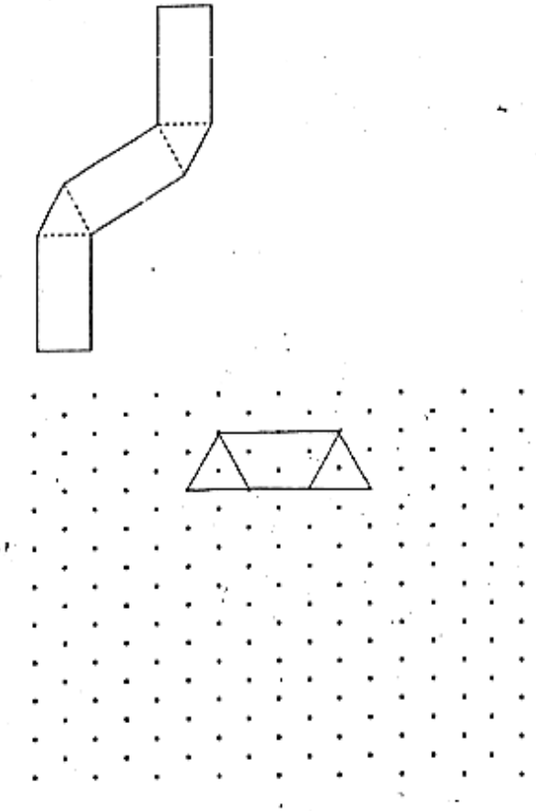


Rationale :

- Application of knowledge and skills of drawing 3D figures shows some effectiveness
- Draws 3D triangular prism with errors and with omissions-hidden edges not shown

Question 9 Code 20

. Draw the three-dimensional figure that will be created when the following net is folded. Show all vertices and edges.

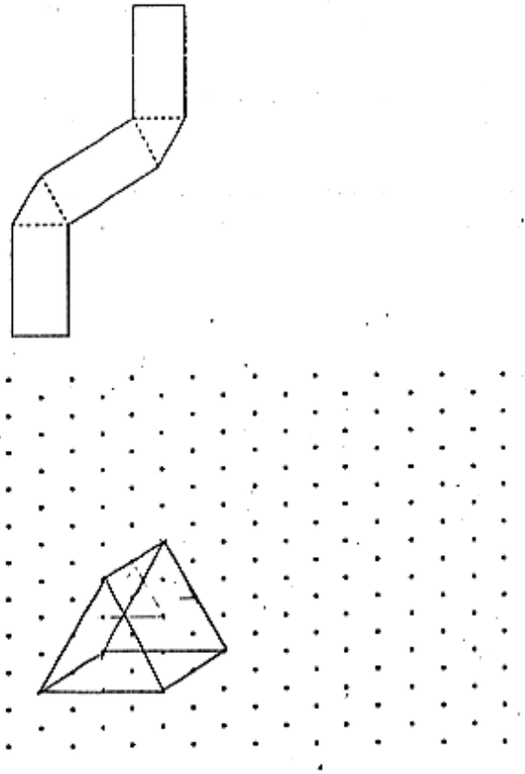


Rationale :

- Application of knowledge and skills of drawing 3D figures shows some effectiveness
- Errors in the application of the procedures- uses isometric dot paper incorrectly and creates a "flat" figure

Question 9 Code 30

. Draw the three-dimensional figure that will be created when the following net is folded. Show all vertices and edges.

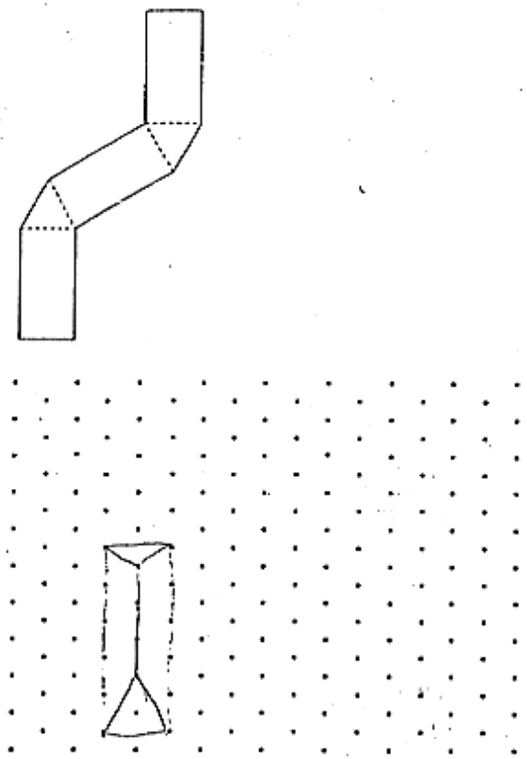


Rationale :

- Application of knowledge and skills of drawing 3D figures shows considerable effectiveness
- Triangular prism drawn- showing hidden edges and vertices but 3 faces are square not rectangular (error)

Question 9 Code 30

. Draw the three-dimensional figure that will be created when the following net is folded. Show all vertices and edges.

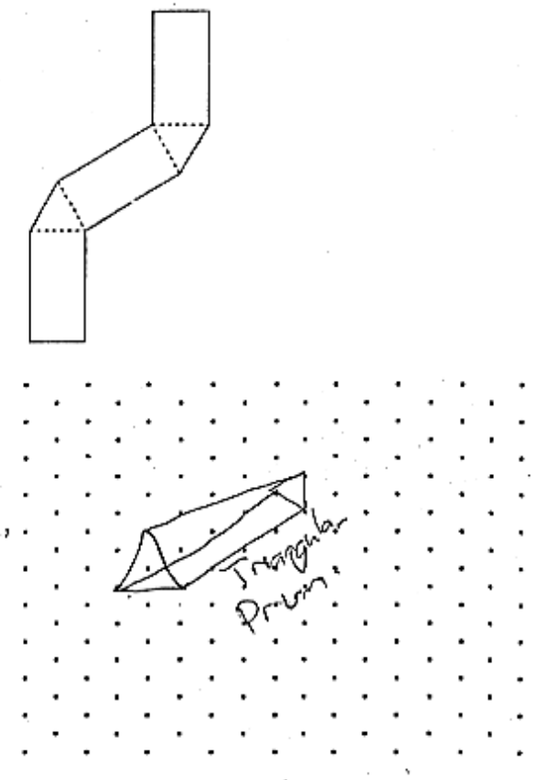


Rationale :

- Application of knowledge and skills of drawing 3D figures shows considerable effectiveness
- Aerial view of triangular prism with minor errors in application

Question 9 Code 30

. Draw the three-dimensional figure that will be created when the following net is folded. Show all vertices and edges.



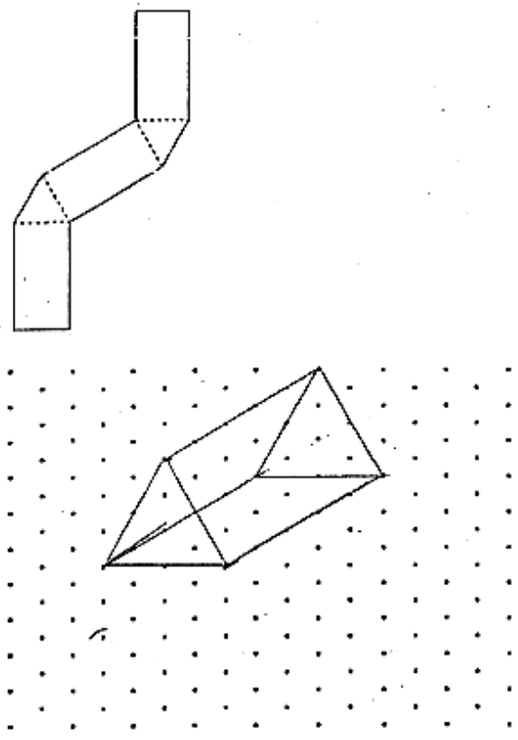
Rationale :

- Application of knowledge and skills of drawing 3D figures shows considerable effectiveness
- Triangular prism with hidden edges drawn but minor error with one of the triangular faces

Code	Description
B	Blank – nothing written or drawn in response
I	Illegible, Irrelevant, Off Topic
10	Application of knowledge and skills of drawing three-dimensional figures shows limited effectiveness due to • misunderstanding of concepts • incorrect selection or misuse of procedures.
20	Application of knowledge and skills of drawing three-dimensional figures shows some effectiveness due • a partial understanding of concepts • errors and/or omissions in the application of procedures.
30	Application of knowledge and skills of drawing three-dimensional figures shows considerable effectiveness due to • an understanding of most concepts • minor errors and/or omissions in the application of the procedures.
40	Application of knowledge and skills of drawing three-dimensional figures shows a high degree of effectiveness due to • a thorough understanding of the concepts • an accurate application of the procedures. • i.e. student draws an appropriate three-dimensional figure with appropriate size and shape (minor errors do not detract from a thorough understanding).

Question 9 Code 40

Draw the three-dimensional figure that will be created when the following net is folded. Show all vertices and edges.

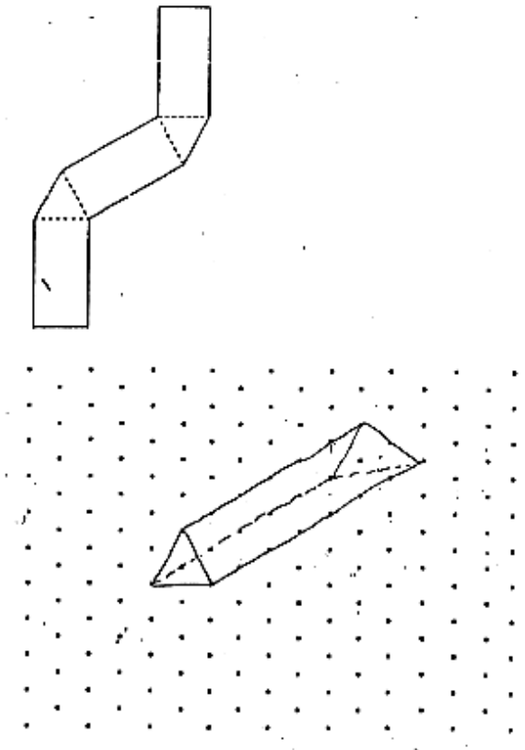


Rationale :

- Application of knowledge and skills of drawing 3D figures shows a high degree of effectiveness
- Appropriately drawn triangular prism using the isometric dot paper- no errors or omissions

Question 9 Code 40

Draw the three-dimensional figure that will be created when the following net is folded. Show all vertices and edges.



Rationale :

- Application of knowledge and skills of drawing 3D figures shows a high degree of effectiveness
- Minor error does not detract from a thorough understanding of being able to draw appropriate triangular prism (triangular face not drawn exactly)

Code	Description
B	Blank – nothing written or drawn in response
I	Illegible, Irrelevant, Off Topic
10	Problem-solving process of examining probability shows limited effectiveness due to • minimal evidence of a solution process • limited identification of important elements of the problem • too much emphasis on unimportant elements of the problem • no conclusions presented • conclusion presented without supporting evidence
20	Problem-solving process of examining probability shows some effectiveness due to • an incomplete solution process • identification of some of the important elements of the problem • some understanding of the relationships between important elements of the problem • simple conclusions with little supporting evidence
30	Problem-solving process of examining probability shows considerable effectiveness due to • a solution process that is nearly complete • identification of most of the important elements of the problem • a considerable understanding of the relationships between important elements of the problem • appropriate conclusions with supporting evidence
40	Problem-solving process of examining probability shows a high degree of effectiveness due to • a complete solution process • identification of all important elements of the problem • a thorough understanding of the relationships between all of the important elements of the problem • appropriate conclusions with thorough and insightful supporting evidence (i.e. identifies 3, 6, 9 and 12 as multiples of 12 and expresses the probability as 4/12 or reduced)

Question 10 — Code 10

A spinner has 12 equal-sized sections. The sections are labelled 1 through 12.
What is the probability that Frieda will spin a multiple of 3 on her first spin?

Explain how you know.

Because on a scale of 1-12 there are more multiples of 3

The probability is probably

Rationale :
- Minimal evidence of a solution process
- Conclusion presented without supporting evidence (did not list multiples or probability statement)

Question 10 — Code 10

A spinner has 12 equal-sized sections. The sections are labelled 1 through 12.
What is the probability that Frieda will spin a multiple of 3 on her fist spin?

Explain how you know.

$\frac{3}{12} \times 4$

The probability is 12

Rationale :
- Minimal evidence of a solution process
- Does not identify important elements of the problem

Question 10 Code 20

A spinner has 12 equal-sized sections. The sections are labelled 1 through 12.

What is the probability that Frieda will spin a multiple of 3 on her first spin?

Explain how you know.

The probability is $\frac{1}{12}$.

Rationale :

- Some understanding of the relationships between important elements of the problem -probability but not multiples
- An incomplete solution process

Question 10 Code 20

A spinner has 12 equal-sized sections. The sections are labelled 1 through 12.

What is the probability that Frieda will spin a multiple of 3 on her first spin?

Explain how you know.

The spinner might go to 3, 6, 9, or 12, or might not go to those numbers it depends if she spins it hard then it might go to 3, 6, 9, or 12, you never no what you will get.

The probability is a chance of 1-5

Rationale :

- Identification of some of the important elements of the problem- identifies multiples but not probability
- An incomplete solution process

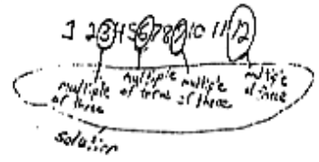
Question 10 Code 20

A spinner has 12 equal-sized sections. The sections are labelled 1 through 12.

What is the probability that Frieda will spin a multiple of 3 on her first spin?

Explain how you know.

G: numbers 1-12 on Spinner
R: what is the probability that Frieda will spin a multiple of 3 on her first spin?
A:



sentence:

The probability is 4

Rationale :

- Identification of some of the important elements of the problem- identifies multiples but not probability
- An incomplete solution process

Question 10 Code 30

A spinner has 12 equal-sized sections. The sections are labelled 1 through 12.
What is the probability that Frieda will spin a multiple of 3 on her first spin?

Explain how you know.

$\frac{4}{12} = \frac{1}{3}$

because there are only 4 multiples of three on the spinner

The probability is $\frac{4}{12} = \frac{1}{3}$

Rationale :

- A solution process that is nearly complete- lists the correct probability but does not state what the multiples of 3 are

Question 10 Code 30

A spinner has 12 equal-sized sections. The sections are labelled 1 through 12.
What is the probability that Frieda will spin a multiple of 3 on her first spin?

Explain how you know.

I know this because 3 goes in 12 4 times and thats $\frac{4}{12}$ and I shrunk it smaller to $\frac{2}{6}$

The probability is $\frac{1}{3}$

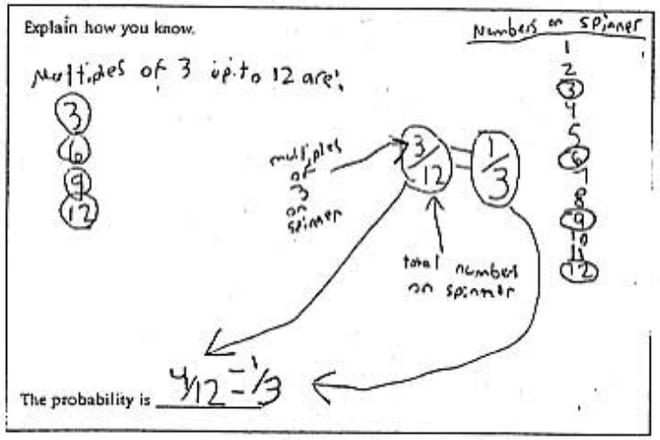
Rationale :

- A considerable understanding of the relationships between important elements of the problem
- A solution process that is nearly complete although does not list multiples of 3 up to 12

Code	Description
B	Blank – nothing written or drawn in response
I	Illegible, Irrelevant, Off Topic
10	Problem-solving process of examining probability shows limited effectiveness due to • minimal evidence of a solution process • limited identification of important elements of the problem • too much emphasis on unimportant elements of the problem • no conclusions presented • conclusion presented without supporting evidence
20	Problem-solving process of examining probability shows some effectiveness due to • an incomplete solution process • identification of some of the important elements of the problem • some understanding of the relationships between important elements of the problem • simple conclusions with little supporting evidence
30	Problem-solving process of examining probability shows considerable effectiveness due to • a solution process that is nearly complete • identification of most of the important elements of the problem • a considerable understanding of the relationships between important elements of the problem • appropriate conclusions with supporting evidence
40	Problem-solving process of examining probability shows a high degree of effectiveness due to • a complete solution process • identification of all important elements of the problem • a thorough understanding of the relationships between all of the important elements of the problem • appropriate conclusions with thorough and insightful supporting evidence (i.e. identifies 3, 6, 9 and 12 as multiples of 12 and expresses the probability as 4/12 or reduced)

Question 10 Code 40

A spinner has 12 equal-sized sections. The sections are labelled 1 through 12.
What is the probability that Frieda will spin a multiple of 3 on her first spin?

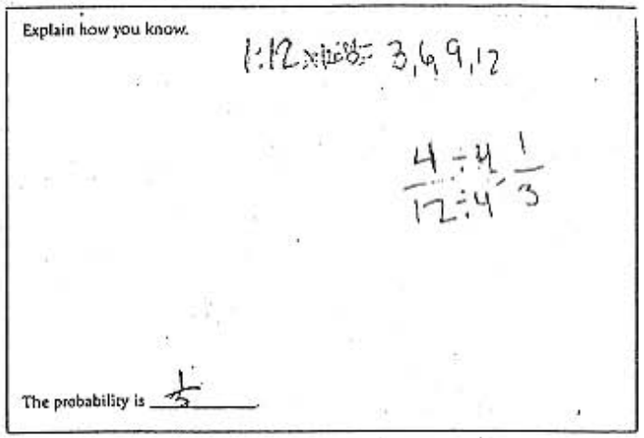


Rationale :

- Complete solution process
- Identifies 3,6,9 and 12 as multiples of 12 and expresses the probability as 4/12 and reduces this fraction to 1/3

Question 10 Code 40

A spinner has 12 equal-sized sections. The sections are labelled 1 through 12.
What is the probability that Frieda will spin a multiple of 3 on her first spin?



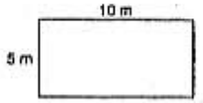
Rationale :

- Complete solution process
- Identifies 3,6,9 and 12 as multiples of 12 and expresses the probability as 4/12 and reduces this fraction to 1/3

Code	Description
B	Blank – nothing written or drawn in response
I	Illegible, Irrelevant, Off Topic
10	Problem-solving process related to calculation and comparison of area shows limited effectiveness due to • minimal evidence of a solution process • limited identification of important elements of the problem • too much emphasis on unimportant elements of the problem • no conclusions presented • conclusion presented without supporting evidence
20	Problem-solving process related to calculation and comparison of area shows some effectiveness due to • an incomplete solution process • identification of some of the important elements of the problem • some understanding of the relationships between important elements of the problem • simple conclusions with little supporting evidence
30	Problem-solving process related to calculation and comparison of area shows considerable effectiveness • a solution process that is nearly complete • identification of most of the important elements of the problem • a considerable understanding of the relationships between important elements of the problem • appropriate conclusions with supporting evidence
40	Problem-solving process related to calculation and comparison of area shows a high degree of effectiveness • a complete solution process • identification of all important elements of the problem • a thorough understanding of the relationships between all of the important elements of the problem • appropriate conclusions with thorough and insightful supporting evidence (i.e. accurately uses an appropriate strategy to calculate that 5000 tiles are needed)

Question 11 — Code 10

Susie wants to tile the floor of her family's rectangular play room. The tiles she plans to use are 10 cm by 10 cm squares. A drawing of the room is shown below.



How many of the square tiles will Susie need to cover the floor of the play room?

Show your work.

10m
× 5 m
10 m
5 m
125 m

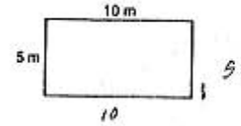
Susie will need 125 tiles.

Rationale :

- Minimal evidence of a solution process
- Limited identification of important elements of the problem

Question 11 — Code 10

Susie wants to tile the floor of her family's rectangular play room. The tiles she plans to use are 10 cm by 10 cm squares. A drawing of the room is shown below.



How many of the square tiles will Susie need to cover the floor of the play room?

Show your work.

Plan: add it?

10+10+5+5

Side 1 + side 2 + side 3 + side 4 = 30

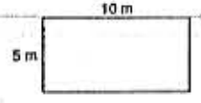
Susie will need 30 tiles.

Rationale :

- Minimal evidence of a solution process or limited identification of important elements of the problem
- Calculates perimeter

Question 11 Code 20

Susie wants to tile the floor of her family's rectangular play room. The tiles she plans to use are 10 cm by 10 cm squares. A drawing of the room is shown below.



How many of the square tiles will Susie need to cover the floor of the play room?

Show your work.

100cm = 1m
1000cm = 10M
500cm = 5m

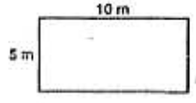
Susie will need 150 tiles.

Rationale :

- Some understanding of the relationships between important elements of the problem
- Conversions done correctly then adds to find number of tiles

Question 11 Code 20

Susie wants to tile the floor of her family's rectangular play room. The tiles she plans to use are 10 cm by 10 cm squares. A drawing of the room is shown below.



How many of the square tiles will Susie need to cover the floor of the play room?

Show your work. I got my answer by drawng on grid paper and I drew the diagram the one you showed us on top of this box and then did the 10cm by 10cm squared thing then; multipided 5x10 then go 50

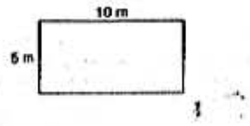
Susie will need 50 tiles.

Rationale :

- Incomplete solution process
- Some understanding of the relationships between important elements of the problem- finds area of given rectangle

Question 11 Code 30

Susie wants to tile the floor of her family's rectangular play room. The tiles she plans to use are 10 cm by 10 cm squares. A drawing of the room is shown below.



How many of the square tiles will Susie need to cover the floor of the play room?

Show your work.

$10m \times 5m = area = 50m^2 = 5000cm^2$

$10cm \times 10cm = area\ of\ tiles = 100cm^2 = 1m^2$

$5000cm^2 \div 100cm^2 = 50\ tiles\ of\ 10cm\ by\ 10cm$

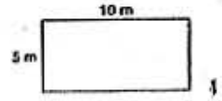
Susie will need 50 tiles.

Rationale :

- Problem solving process is nearly complete
- Converts m^2 to cm^2 incorrectly

Question 11 Code 30

Susie wants to tile the floor of her family's rectangular play room. The tiles she plans to use are 10 cm by 10 cm squares. A drawing of the room is shown below.



How many of the square tiles will Susie need to cover the floor of the play room?

Show your work.

All I did was pretends 5 [illegible] 500 and 1000 was 10m
I did that because 5m is the same as 500cm 10m is the same as 1000cm multiplied 0 so there's your answer

Susie will need 50000 tiles.

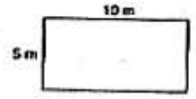
500
1000
5000
50000
500000

Rationale :

- Solution process is nearly complete
- Does not divide total area by area of 1 tile

Question 11 Code 30

Susie wants to tile the floor of her family's rectangular play room. The tiles she plans to use are 10 cm by 10 cm squares. A drawing of the room is shown below.



How many of the square tiles will Susie need to cover the floor of the play room?

Show your work.

$5 \times 10 = 50m^2 = room$

$10 \times 10 = 100cm^2 = tile$

$50m^2 = 5000cm^2$

$5000cm^2 \div 100cm^2$

50

Susie will need 50 tiles.

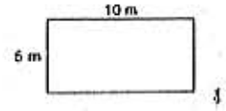
Rationale :

- Solution process is nearly complete
- Considerable understanding of the relationships between important elements of the problem
- Converts m^2 to cm^2 inaccurately

Code	Description
B	Blank – nothing written or drawn in response
I	Illegible, Irrelevant, Off Topic
10	Problem-solving process related to calculation and comparison of area shows limited effectiveness due to • minimal evidence of a solution process • limited identification of important elements of the problem • too much emphasis on unimportant elements of the problem • no conclusions presented • conclusion presented without supporting evidence
20	Problem-solving process related to calculation and comparison of area shows some effectiveness due to • an incomplete solution process • identification of some of the important elements of the problem • some understanding of the relationships between important elements of the problem • simple conclusions with little supporting evidence
30	Problem-solving process related to calculation and comparison of area shows considerable effectiveness • a solution process that is nearly complete • identification of most of the important elements of the problem • a considerable understanding of the relationships between important elements of the problem • appropriate conclusions with supporting evidence
40	Problem-solving process related to calculation and comparison of area shows a high degree of effectiveness • a complete solution process • identification of all important elements of the problem • a thorough understanding of the relationships between all of the important elements of the problem • appropriate conclusions with thorough and insightful supporting evidence (i.e. accurately uses an appropriate strategy to calculate that 5000 tiles are needed)

Question 11 — Code 40

Susie wants to tile the floor of her family's rectangular play room. The tiles she plans to use are 10 cm by 10 cm squares. A drawing of the room is shown below.



How many of the square tiles will Susie need to cover the floor of the play room?

Show your work.

Plan: convert 10m and 5m to cm, multiply 10m and 5m to cm, multiply 10cm with 10cm, divide area of play room with area of one tile

Work: 10m = 1000cm
5m = 500cm

1000 × 500 = 500000cm²

10cm × 10cm = 100cm²

500000 ÷ 100 = 5000

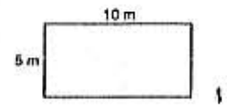
Susie will need 5000 tiles.

Rationale :

- Thorough understanding of the relationships between all of the important elements to reach an appropriate conclusion with supporting evidence

Question 11 — Code 40

Susie wants to tile the floor of her family's rectangular play room. The tiles she plans to use are 10 cm by 10 cm squares. A drawing of the room is shown below.



How many of the square tiles will Susie need to cover the floor of the play room?

Show your work.

length	width	# of tiles
10m = 1000cm	5m = 500cm	100 × 50 = 5000
1000cm ÷ 10cm = 100	500cm ÷ 10cm = 50	

Susie will need 5000 tiles.

Rationale :

- Thorough understanding of the relationships between all of the important elements to reach an appropriate conclusion with supporting evidence