SESSION 1

This session contains 31 multiple-choice questions. Fill in the circle for your answer to each multiple-choice question.

You may use a protractor and a ruler during this session. You may **not** use a calculator during this session.

SAMPLE

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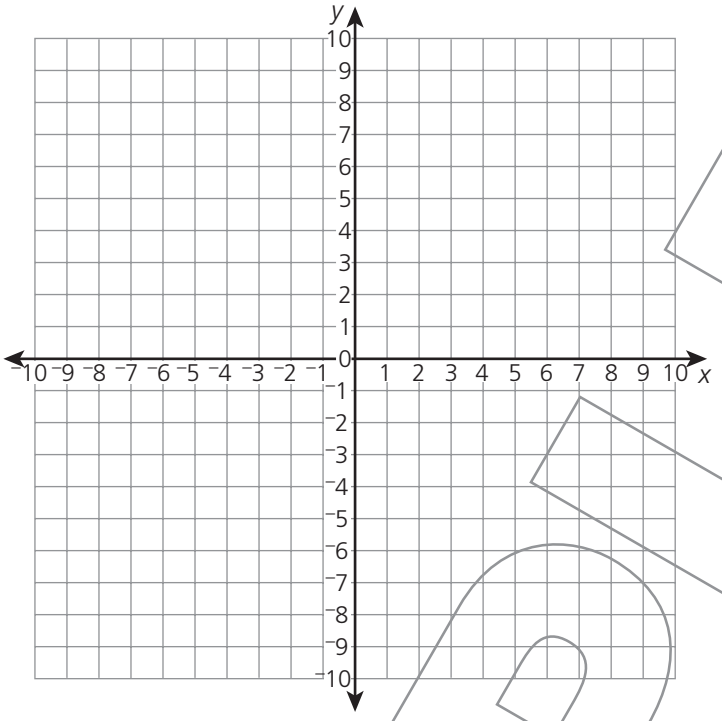
28 Use this coordinate plane to help you solve this problem.



A city map is shown on a coordinate plane. Each square on the plane represents one city block. The fire department is located at the point (4, -3). The police department is located 5 blocks north of the fire department. What are the coordinates of the police department on the city map?

Ⓐ (4, 2)

Ⓑ (4, 8)

Ⓒ (-1, -3)

Ⓓ (9, -3)

29 Allison started a game with 0 points. She earned 2 points for each question she answered correctly. She lost 1 point for each question she answered incorrectly. During the game, Allison answered 12 questions correctly and 4 questions incorrectly. Which expression can be used to find the total number of points she had at the end of the game?

Ⓐ $12(2) + 4(-1)$

Ⓑ $12(2) - 4(-1)$

Ⓒ $(12 + 2) + (4 - 1)$

Ⓓ $(12 + 2) - (4 - 1)$

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SESSION 2

This session contains seven multiple-choice questions, seven short constructed-response items, and one extended constructed-response item. Fill in the circle for your answer to each multiple-choice question. Write your answers for the constructed-response items in the spaces provided.

You may use a protractor and a ruler during this session. You may use a calculator during this session.

SAMPLE

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Directions: Read each problem. Then fill in the circle of the best answer.

32 Chika found four different recipes for banana bread. The number of eggs and bananas used in each recipe are shown in this table.

BANANA BREAD RECIPES

Recipe	Number of Eggs	Number of Bananas
A	3	6
B	2	4
C	1	3
D	3	8

Which two recipes use the same ratio of eggs to bananas?

Ⓐ recipe A and recipe B

Ⓑ recipe A and recipe C

Ⓒ recipe B and recipe D

Ⓓ recipe C and recipe D

33 Which of the following equations is true?

Ⓐ $9x - 3x = 3x(3)$

Ⓑ $6x - 2x = 2x(3 - 1)$

Ⓒ $9x - 3x = 3x(3 - x)$

Ⓓ $6x - 2x = 2x(3 - 2x)$

SAMPLE

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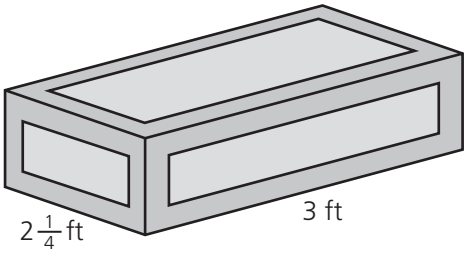
44 The packing crate below is 3 feet long and $2\frac{1}{4}$ feet wide. It is filled completely with 648 boxes that measure $\frac{1}{4}$ foot on each side.



Part A: What is the height, in feet, of the packing crate?

Show your work.

Answer: _____ feet

Part B: What is the volume, in cubic feet, of the packing crate? Show how you can find the volume using the number of boxes packed into the crate and using the volume formula.

Show your work.

Answer: _____ cubic feet

SAMPLE

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46 Each ticket to a matinee movie costs $8.

Part A: Complete this table relating the number of movie tickets bought, *m,* to the total cost, *c,* of the tickets.

m	*c*
4	
6	
9	

Part B: Write an equation that models this situation, using the variables *m* and *c*.

Answer: _____

Brandy thinks the number of movie tickets bought depends on the total cost of the movie tickets. Brandy's brother thinks the total cost of the movie tickets depends on the number of movie tickets bought.

Part C: Whose thinking is correct, Brandy's, her brother's, or both? Explain how you know.

_____

_____

_____

_____

SAMPLE

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