

Mathematics

SESSION 1

You may use your reference sheet and MCAS ruler during this session.

You may **not** use a calculator during this session.



DIRECTIONS

This session contains twelve multiple-choice questions, two short-answer questions, and three open-response questions. Mark your answers to these questions in the spaces provided in your Student Answer Booklet.

- 1 Charlotta wrote the equation below on a card.

$$\square \div 8 = 5$$

If Charlotta's equation is true, which of the following is also true?

- A. $\square = 5 \times 8$
- B. $\square = 5 - 8$
- C. $\square = 5 \div 8$
- D. $\square = 5 + 8$

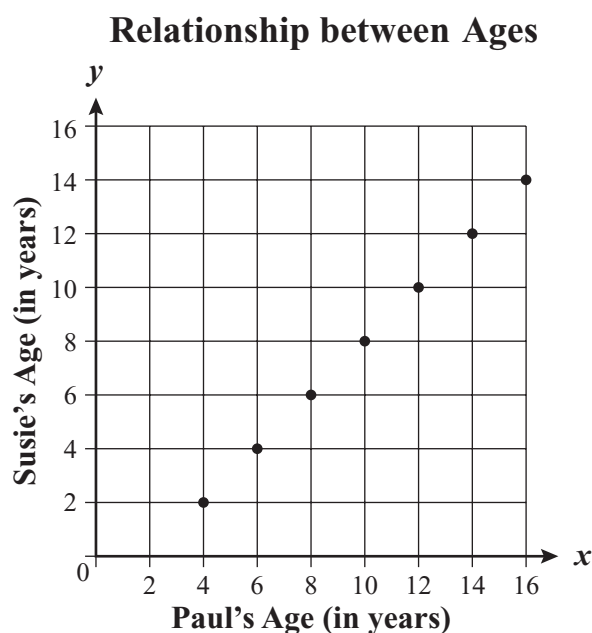
- 2 Sheila started the geometric pattern shown below.

1, 3, 9, 27, ?

If the pattern continues as shown, what is the next term in the pattern?

- A. 36
- B. 54
- C. 81
- D. 108

- 3 The graph below represents the relationship between Paul's age and Susie's age.



Which of the following best describes the relationship between Paul's age and Susie's age for all the points shown on the graph?

- A. Susie is twice as old as Paul.
- B. Susie is 2 years older than Paul.
- C. Susie is half as old as Paul.
- D. Susie is 2 years younger than Paul.

- 4 The chart below lists the sizes of popcorn, sizes of drinks, and kinds of snacks available at a movie theater.

Movie Theater Concessions

Popcorn Sizes	Drink Sizes	Kinds of Snacks
Small	Small	Candy Bar
Medium	Medium	Pretzel
Large	Large	Hot Dog
	Jumbo	Licorice
		Sour Pops
		Ice Cream Bar

What is the total number of different combinations of 1 size of popcorn, 1 size of drink, and 1 kind of snack?

- A. 7
- B. 13
- C. 48
- D. 72