

SESSION 1

This session contains 30 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

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

- 1** Brandon wrote the number 3,452. He chose two digits and recorded the value of each one. Which chart shows the correct values of the chosen digits?

(A)

Digit	Value
4	4×10^2
5	5×10^1

(B)

Digit	Value
4	4×10^3
5	5×10^1

(C)

Digit	Value
3	3×10^2
5	5×10^1

(D)

Digit	Value
3	3×10^2
5	5×10^2

- 2** On a tree farm, $\frac{3}{4}$ of each acre is planted with blue spruce trees. If there are $15\frac{1}{2}$ acres of trees on the farm, how many acres are planted with blue spruce trees?

(A) $5\frac{5}{8}$ acres

(B) 6 acres

(C) $11\frac{1}{4}$ acres

(D) $11\frac{5}{8}$ acres

SESSION 2

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

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

SAMPLE

35

Colby drew three rectangles. Rectangles 1 and 2 both have an area of $\frac{1}{8}$ square foot. The area of rectangle 3 is $\frac{1}{2}$ square foot. Which of the following tables shows the possible dimensions of each rectangle?

Ⓐ

Rectangle	Dimensions (in feet)
1	$\frac{1}{2} \times \frac{1}{6}$
2	$\frac{1}{8} \times 1$
3	$\frac{2}{5} \times \frac{5}{4}$

Ⓑ

Rectangle	Dimensions (in feet)
1	$\frac{1}{4} \times \frac{1}{2}$
2	$\frac{1}{8} \times 1$
3	$\frac{2}{5} \times \frac{5}{4}$

Ⓒ

Rectangle	Dimensions (in feet)
1	$\frac{1}{4} \times \frac{1}{2}$
2	$\frac{1}{8} \times 1$
3	$\frac{2}{5} \times \frac{3}{5}$

Ⓓ

Rectangle	Dimensions (in feet)
1	$\frac{1}{4} \times \frac{1}{4}$
2	$\frac{1}{8} \times 1$
3	$\frac{2}{5} \times \frac{5}{4}$

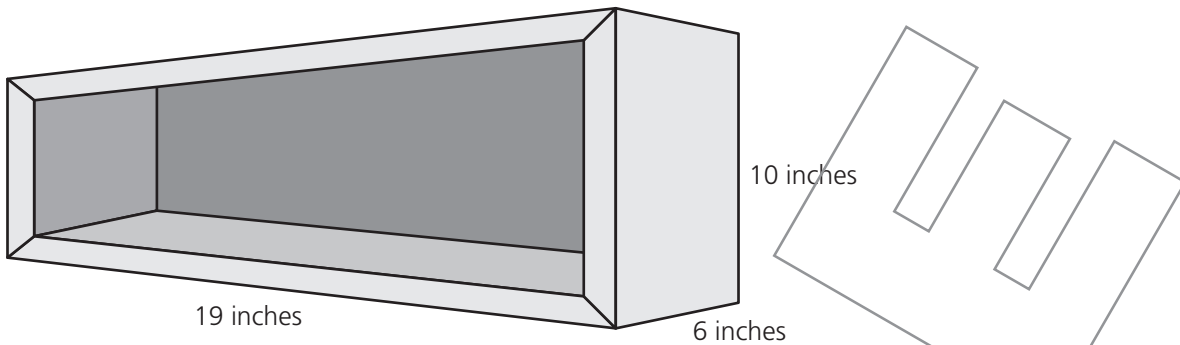
36

A digital thermometer shows the temperature 36.492°C . What is the temperature rounded to the nearest hundredth?

Ⓐ 36°C Ⓑ 36.5°C Ⓒ 36.49°C Ⓓ 36.492°C

43

Hilary measured one of her cabinets as shown below.



Part A: What is the area, in square inches, of the base of the cabinet?

Answer: _____ square inches

Part B: Write and solve an equation to find the volume, in cubic inches, of the cabinet.

Answer: _____ cubic inches

45

Jacob wants to swim 3,300 meters in 66 minutes.

Part A: How many meters must Jacob swim in 1 minute?

Show your work.

Answer: _____ meters

Jacob set some swimming goals for himself.

SWIMMING GOALS

Distance (in meters)	Time (in minutes)
400	5
1,500	24.3

Part B: To the nearest tenth of a meter, how many meters per minute will Jacob have to swim to meet his goal for the 1,500-meter distance?

Answer: _____ meters per minute

Part C: Jacob can swim the 400-meter distance in 6.4 minutes now. How many more meters per minute will Jacob need to swim to reach his goal? Explain how you found your answer.
