1 Expectation: 7.4(A)

A circular pizza has a diameter of *d* inches. Which of the following formulas represents the area of the pizza, *A*, in square feet?

A
$$A = \pi \frac{d^2}{2^2 \times 12}$$

B
$$A = \pi \frac{d^2}{12^2}$$

C
$$A = \pi \frac{d^2}{12}$$

D
$$A = \pi \frac{d^2}{2^2 \times 12^2}$$

2 Expectation: 7.6(B)

Quadrilateral LAKE is described below.

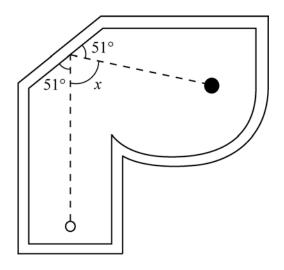
- Side \overline{LA} is parallel to side \overline{EK} .
- Side \overline{AK} is parallel to side \overline{LE} .
- Side \overline{AK} is twice as long as side \overline{LA} .
- The measure of $\angle AKE$ is 50°.

Which of the following best describes quadrilateral *LAKE*?

- **F** Parallelogram
- **G** Rectangle
- **H** Rhombus
- J Trapezoid

3 Expectation: 7.6(A)

Blake made a hole-in-one playing miniature golf by hitting the ball along the path shown below.



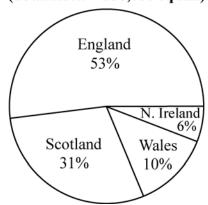
What is the measure of $\angle x$?

- **A** 51°
- **B** 78°
- **C** 81°
- **D** 86°

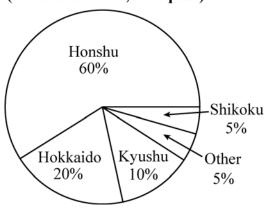
4 Expectation: 7.11(B)

Look at the two circle graphs below.

Area of Nations of the United Kingdom (Total Area = 250,000 sq km)



Area of Islands of Japan (Total Area = 375,000 sq km)



According to the graphs, which statement is correct?

- **F** Scotland and Hokkaido are nearly the same size.
- **G** Wales is larger than Hokkaido.
- **H** Kyushu and Wales are nearly the same size.
- **J** England is about 180,000 square kilometers in area.

5 Expectation: 7.2(E)

What is the value of this expression?

$$6 \times (16 + 8^2 \div 12)$$

- **A** 40
- **B** 104.49
- **C** 128
- **D** 288

6 Expectation: 7.2(F)

Kenya likes to run on a $\frac{3}{4}$ -mile track at the local high school. If she runs 8 $\frac{1}{2}$ laps on Saturday, how many laps will she need to run on Sunday in order to run 10 $\frac{1}{2}$ total miles over the weekend?

- **F** $1\frac{1}{4}$
- **G** $1\frac{1}{2}$
- **H** 2
- **J** $5\frac{1}{2}$

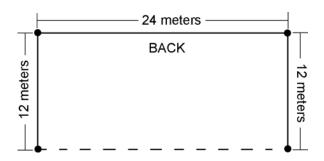
7 Expectation: 7.3(A)

A blues musician signed a contract to do a concert at Municipal Auditorium. The contract stated that the musician will receive 40% of the money from ticket sales. Tickets cost \$14.35, and 2,318 tickets were sold. How much money should the musician receive from ticket sales?

- **A** \$13,305.32
- **B** \$13,592.54
- **C** \$13,830.85
- **D** \$14,119.28

8 Expectation: 7.9(A)

Ryan is putting a fence around his backyard. The fence will go along one side of the yard, across the back, and then along the other side of the yard, as shown by the solid lines below. A fence post will be placed at each of the four corners, and then additional fence posts will be placed every 3 meters.



How many fence posts will be needed to complete the fence?

		1	7	•		
\bigcirc	<u> </u>	0	\bigcirc		<u> </u>	<u> </u>

Item Number	Reporting Category	Readiness or Supporting	Content Student Expectation	Process Student Expectation	Correct Answer
1	2	Supporting	7.4(A)	7.14 (A)	D
2	3	Supporting	7.6(B)	7.13 (C)	F
3	3	Supporting	7.6(A)	7.13 (B)	В
4	5	Readiness	7.11(B)	7.15 (B)	F
5	1	Supporting	7.2(E)		С
6	1	Readiness	7.2(F)	7.13 (A)	J
7	2	Readiness	7.3(A)	7.13 (B)	А
8	4	Readiness	7.9(A)	7.13 (C)	17