NEW ENGLAND
COMMON ASSESSMENT PROGRAM

Released Items
2010

Grade 6
Mathematics

Mathematics

1 Sally planted pumpkin seeds. She shaded part of this rectangle gray to represent the percent of the pumpkin seeds that sprouted.
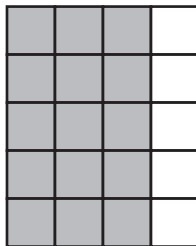
What percent of the pumpkin seeds sprouted?

A. 15%

B. 60%

C. 75%

D. 80%

2 The table below shows the different weights of ingredients Melissa bought to make soup.

Soup Ingredients

Ingredient	Weight (in pounds)
Onions	1.09
Carrots	1.3
Potatoes	1.13
Chicken	1.22

Which list shows the weights of the ingredients in order from **least** to **greatest**?

A. 1.3, 1.09, 1.13, 1.22

B. 1.3, 1.13, 1.22, 1.09

C. 1.09, 1.13, 1.22, 1.3

D. 1.09, 1.3, 1.13, 1.22

3 Samantha ordered 61 picture frames for her business. The frames are mailed in boxes that can each hold 7 frames. What is the least number of boxes that can be used to mail Samantha's picture frames?

A. 5

B. 6

C. 8

D. 9

4 Emily spent $\frac{1}{4}$ hour fixing the broken chain on her bike and $\frac{1}{6}$ hour filling her bike tires with air. How much time in all did Emily work on her bike?
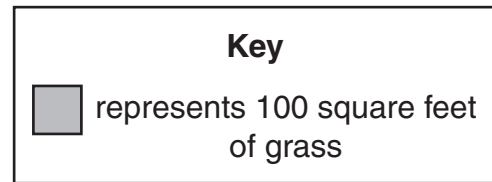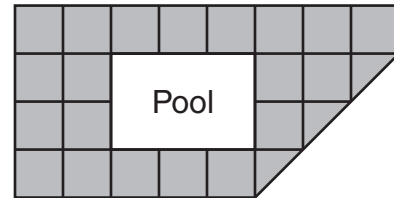
A. $\frac{2}{10}$ hour

B. $\frac{5}{24}$ hour

C. $\frac{3}{12}$ hour

D. $\frac{5}{12}$ hour

5 A dog shelter uses 75 pounds of dog food each day. A 25-pound bag of dog food costs $20. How much money does the dog shelter spend on dog food for 14 days?
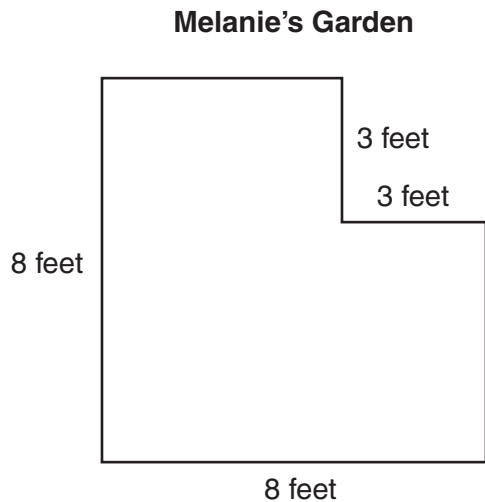
A. $ 120

B. $ 280

C. $ 840

D. $1240

6 This diagram shows the area of grass around a pool.

Key

represents 100 square feet of grass

What is the area of the grass in the diagram?

A. 2150 square feet

B. 2200 square feet

C. 2300 square feet

D. 2750 square feet

7 The diagram below shows Melanie's garden.

Melanie's Garden

Melanie plans to put a fence along the border of her garden. What is the minimum number of feet of fencing she needs?

A. 22
B. 32
C. 58
D. 64

8 Tanya is 4 feet 7 inches tall. What is her height in inches? [1 foot = 12 inches]
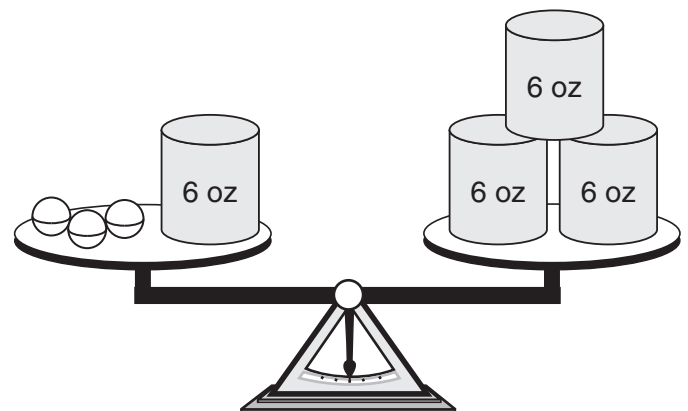
A. 47 inches
B. 48 inches
C. 55 inches
D. 57 inches

9 Donna raises money for her school chorus program by walking in a race.

- Mrs. Stephens gives a total of $5.
- Mr. Jones gives $2 for every mile Donna walks in the race.

Donna walks m miles. Which expression represents the total amount of money she receives from Mrs. Stephens and Mr. Jones?

A. $2 + 5 \cdot m$
B. $5 + 2 \cdot m$
C. $7 \cdot m$
D. $7 + m$

10 The scale below is balanced.

How many ounces does one ⊖ weigh?

A. 4 oz
B. 8 oz
C. 9 oz
D. 21 oz

11 Which number fits these two clues?

- Clue 1: It is a prime number.
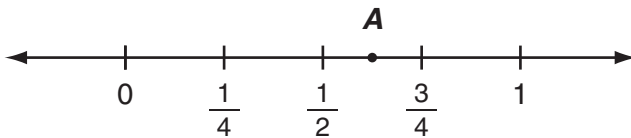- Clue 2: It is a factor of both 42 and 91.

12 Look at this pattern.

1, 5, 3, 7, 5, 9, 7, 11, _?_, _?_

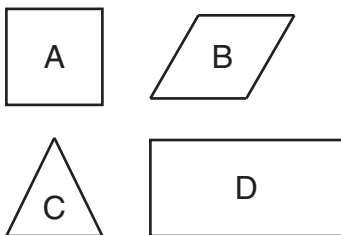What are the next two numbers in the pattern?

13 Look at this number line.

Point *A* is halfway between $\frac{1}{2}$ and $\frac{3}{4}$. What fraction does point *A* represent? Show your work or explain how you know.

14 Kendrick is making a square pyramid. He will trace some of these shapes to make the faces of his pyramid. For each face, he will trace a whole shape.

A	B

C	D

a. Which shapes will Kendrick trace?

b. How many times will he trace each shape to make the faces of his square pyramid?

15 This table shows Kevin's first 5 test scores in math class.

Test Scores

Test Number	Test Score
1	75
2	90
3	82
4	84
5	94

a. What is Kevin's median test score?

b. What is Kevin's mean test score?

c. What score does Kevin need to earn on his next math test in order to have a mean score of exactly 87 for the 6 tests? Show your work or explain how you know.