NEW ENGLAND
COMMON ASSESSMENT PROGRAM

Released Items
2011

Grade 6
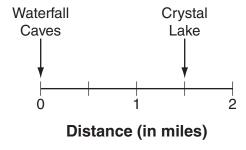## Mathematics

Mathematics

1 Look at this number line.

Distance (in miles)

Leslie is hiking from Waterfall Caves to Crystal Lake. How far will Leslie hike?

A. $\frac{2}{3}$ mile

B. $\frac{3}{4}$ mile

C. $\frac{4}{3}$ miles

D. $\frac{3}{2}$ miles

2 Some children are making puppets.

- Each puppet is made with 4 pieces of string.
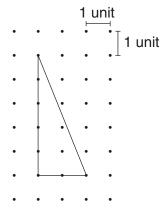
- Each piece of string must be 8 inches long.

What is the greatest number of puppets the children can make with a piece of string that is 120 inches long?

A. 3

B. 4

C. 10

D. 15

3 Which number is a multiple of 24 **and** has 18 as a factor?

A.   6
B. 24
C. 36
D. 72

4 Triangle *QRS* has one obtuse angle. Which statement **must** also be true about triangle *QRS*?

A. Its sides are all different lengths.
B. Its other two angles are acute.
C. One of the remaining angles is acute and the other is obtuse.
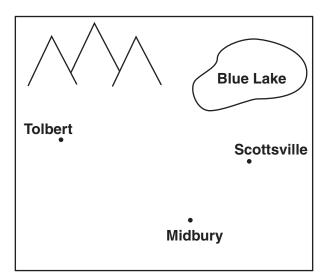D. Two of the sides are exactly the same length.

5 Which solid has parallel bases?

A. a cone
B. a prism
C. a pyramid
D. a sphere

6 Look at this triangle.

1 unit

1 unit

What is the area of the triangle?

A.   4 square units
B.   5 square units
C.   7 square units
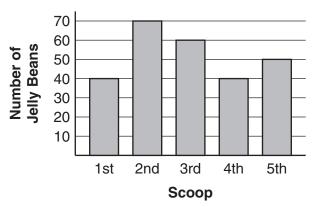D. 10 square units

7 Look at the map.

Scale

1 cm represents 15 km

Use a ruler to answer this question. What is the distance from Tolbert to Scottsville?

A. 75 km

B. 60 km

C. 15 km

D.   5 km

8 Angela took 5 scoops of jelly beans from a jar. The bar graph below shows the number of jelly beans that were in each scoop.
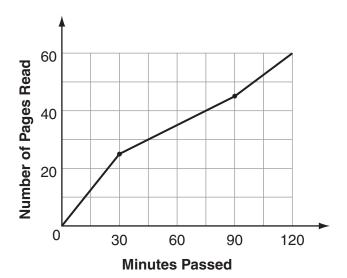

What is the mean number of jelly beans per scoop?

A. 50

B. 52

C. 55

D. 60

9 Henry read a 60-page book in 120 minutes. This graph shows the number of pages he read over time.

Minutes Passed

After how many minutes was Henry exactly halfway through the book?

A. 35 minutes

B. 45 minutes

C. 60 minutes

D. 75 minutes

10 Jonah has a number cube with the faces numbered 1 through 6. Each face has exactly one number. He rolls the cube once. What is the probability that Jonah will roll a 3?

A. $\dfrac{1}{6}$

B. $\dfrac{1}{5}$

C. $\dfrac{3}{6}$

D. $\dfrac{3}{5}$

11 There are 380 students, teachers, and chaperones going on school buses for a field trip. Each school bus can hold 68 passengers. Everyone will ride on a school bus. How many school buses does this group need?

12 Daryl bought 3 pounds of cheese. He used 12 ounces of cheese to make a pizza. After he made the pizza, how much cheese was left? Label your answer with a unit of measure. [1 pound = 16 ounces]

13 Amy, Ben, and Cal ran for class president.

- Amy received $\frac{1}{3}$ of the votes.

- Ben received $\frac{1}{6}$ of the votes.

- Cal received the rest of the votes.

List the students in order from the most votes received to the least votes received. Show your work or explain how you know.

14 This table shows the prices for some items at a school store.

School Supplies

Item	Price
Notebook	$1.99
Glue	$2.48
Scissors	$4.87
Tape	$3.22
Computer paper	$8.97

Zack bought 1 notebook, 1 pair of scissors, and 1 package of computer paper. He paid with a $20 bill. How much change should Zack receive? Show your work or explain how you know.

⓯ The table below shows the relationship between an animal's weight on Earth and what the animal's weight would be on the Moon.

Weight of Animal on Earth	Weight of Animal on the Moon
18 pounds	3 pounds
54 pounds	9 pounds
120 pounds	20 pounds
600 pounds	100 pounds

a. Sheila's dog weighs 90 pounds on Earth. How many pounds would Sheila's dog weigh on the **Moon**? Show your work or explain how you know.

b. Write a rule in words or symbols to find an animal's weight on the **Moon**, if the animal weighs *p* pounds on Earth.

c. Jay's dog would weigh 12 pounds on the Moon. How much does Jay's dog weigh on **Earth**? Show your work or explain how you know.