New York State Testing Program

Mathematics
Book 1

Grade **5**

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47947

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Book 1

Tips for taking the test

Here are some suggestions to help you do your best:

- Be sure to read carefully all the directions in the test book.
- You may use your tools to help you solve any problem on the test.
- Read each question carefully and think about the answer before choosing your response.

This picture means that you will use your ruler.

This picture means that you will use your protractor.

Sample A

Samuel picked 150 strawberries at the strawberry patch. He gave away all the strawberries to 5 friends. If Samuel gave the same number of strawberries to each friend, how many strawberries did each friend receive?

A 30

B 50

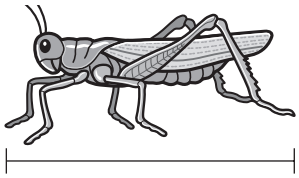
C 145

D 155

Sample B

Use your ruler to help you solve this problem.

Kathy caught a grasshopper like the one shown below.



What is the length, in inches, of the grasshopper?

F 1

G $1\frac{1}{2}$

H 2

J $2\frac{1}{2}$

STOP

1 In 2003, the population of Kings County was 2,472,523. What is the value of the 4 in this number?

A 400

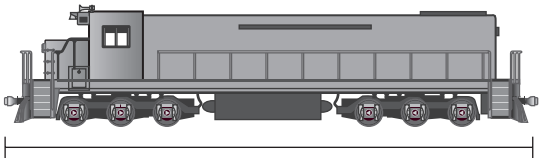
B 40,000

C 400,000

D 4,000,000

2  Use your ruler to help you solve this problem.

Brandon bought a model train like the one shown below.



How long is the model train?

F $2\frac{1}{4}$ inches

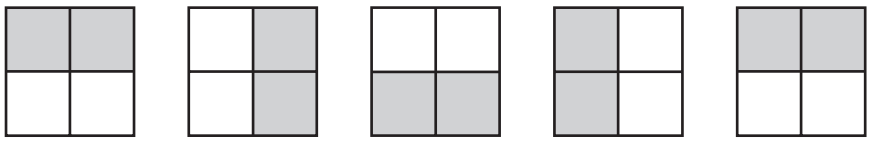
G $2\frac{1}{2}$ inches

H $2\frac{3}{4}$ inches

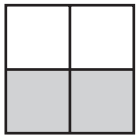
J 3 inches

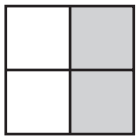
Go On

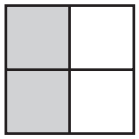
3 Raymond drew the pattern below.

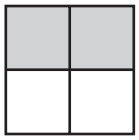


What figure should Raymond draw next to continue the pattern?

A 

B 

C 

D 

4 Which pattern follows the rule below?

Divide by 2.

F 8, 6, 4, 2, . . .

G 9, 7, 5, 3, . . .

H 24, 12, 6, 3, . . .

J 36, 18, 9, 3, . . .

5 What is the total number of lines of symmetry that can be drawn on this rectangle?

A 1

B 2

C 3

D 4

6 There are 40 students on a bus. Of these students, 24 are girls. What fraction of the students are girls? Simplify the fraction to lowest terms.

F $\frac{2}{3}$

G $\frac{3}{5}$

H $\frac{4}{5}$

J $\frac{7}{10}$

7 Abigail, Ryan, and Dale read the same book. Abigail reads $\frac{1}{4}$ of the book. Ryan reads $\frac{1}{10}$ of the book. Dale reads $\frac{1}{5}$ of the book. What is the order of the fractions from **greatest** to **least**?

A $\frac{1}{4}$ $\frac{1}{5}$ $\frac{1}{10}$

B $\frac{1}{10}$ $\frac{1}{5}$ $\frac{1}{4}$

C $\frac{1}{5}$ $\frac{1}{10}$ $\frac{1}{4}$

D $\frac{1}{4}$ $\frac{1}{10}$ $\frac{1}{5}$

8 Tony has a ribbon that measures 0.75 meter in length. He cuts 0.125 meter off the ribbon and gives it to a friend. How much ribbon is left?

F 0.2 meter

G 0.5 meter

H 0.625 meter

J 0.635 meter

9 The fifth-grade classes are having a food drive. There are 84 students in the fifth grade. The goal is for each student to collect 16 cans of food. How many cans will be collected in all if each fifth-grader achieves the goal?

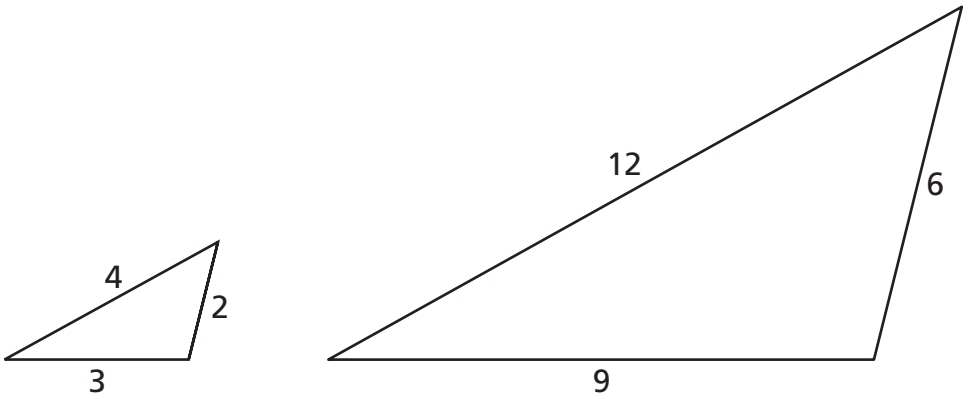
A 48

B 100

C 1,344

D 1,464

10 The triangles below are similar.



Which fraction represents the ratio of the lengths of the sides of the small triangle to the lengths of the sides of the large triangle?

F $\frac{1}{3}$

G $\frac{4}{9}$

H $\frac{1}{2}$

J $\frac{2}{3}$

Go On

11 A cornfield contains 46 rows of corn. There are 32 corn stalks in each row. How many total corn stalks are there in the cornfield?

A 1,362

B 1,372

C 1,462

D 1,472

12 Ron works from 8:45 A.M. to 3:05 P.M. How long does Ron work?

F 5 hours 40 minutes

G 6 hours 20 minutes

H 6 hours 40 minutes

J 7 hours 20 minutes

13 Kenisha's dog ate $\frac{15}{20}$ of a bag of dog food last week. What is $\frac{15}{20}$ in simplest form?

A $\frac{3}{5}$

B $\frac{7}{10}$

C $\frac{2}{3}$

D $\frac{3}{4}$

14 Kwan had $16\frac{3}{4}$ inches of wire. He cut off $4\frac{2}{4}$ inches of wire to use in a craft project. How much wire does Kwan have left?

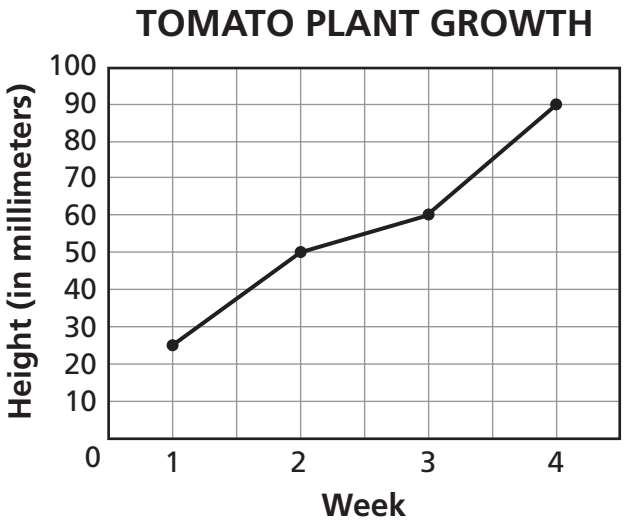
F $12\frac{1}{4}$ inches

G $12\frac{2}{4}$ inches

H $12\frac{3}{4}$ inches

J $13\frac{1}{4}$ inches

15 The line graph below shows the growth of a tomato plant.



How much did the tomato plant grow from Week 1 to Week 4?

A 65 mm

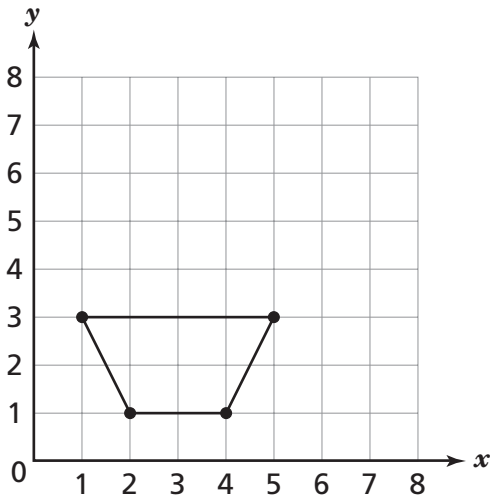
B 70 mm

C 75 mm

D 90 mm

Go On

16 Anna plotted 4 points on the grid below.



She connected them to form a geometric shape. What geometric shape is formed?

F rectangle

G rhombus

H square

J trapezoid

17 Sumiko is putting a flower border at the top of each wall in her room. The room is 14 feet long and 10 feet wide. What is the total length of the border?

perimeter of rectangle = (2 × length) + (2 × width)

A 24 feet

B 28 feet

C 38 feet

D 48 feet

18 Jen and Eric cleaned the kitchen floor together. Jen cleaned $\frac{2}{7}$ of the floor, and Eric cleaned $\frac{3}{7}$ of the floor. How much of the floor did they clean in all?

F $\frac{6}{49}$

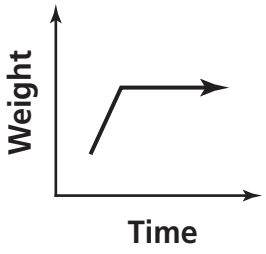
G $\frac{5}{14}$

H $\frac{5}{7}$

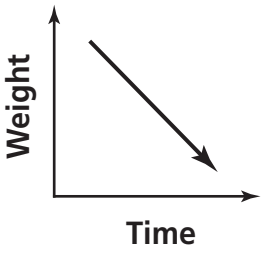
J $\frac{6}{7}$

19 A dog gains weight every month for the first year of its life. Then the dog's weight stays the same for a long time.

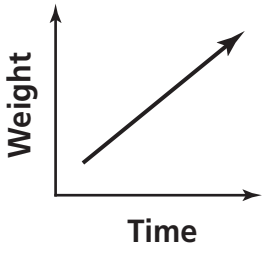
Which line graph **best** represents a dog's weight over time?



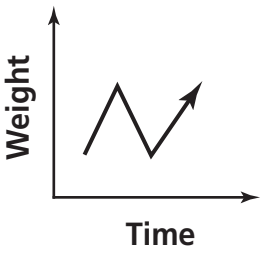
A



C



B



D

Go On

20 Laurel's python is $2\frac{1}{2}$ feet long. If the snake grows 1 foot longer, what will its length be in inches?

F 30 inches

G 32 inches

H 40 inches

J 42 inches

21 The ratio of girls to boys in Mr. Hansen's class is 4:5. The ratio of girls to boys in Ms. Luna's class is 8:10. Which equation correctly compares these ratios?

A $\frac{4}{5} = \frac{10}{8}$

B $\frac{4}{5} = \frac{8}{10}$

C $\frac{4}{10} = \frac{8}{5}$

D $\frac{4}{10} = \frac{5}{8}$

22 What is the mean (average) of the set of numbers below?

15, 39, 30, 10, 8, 39, 27

F 39

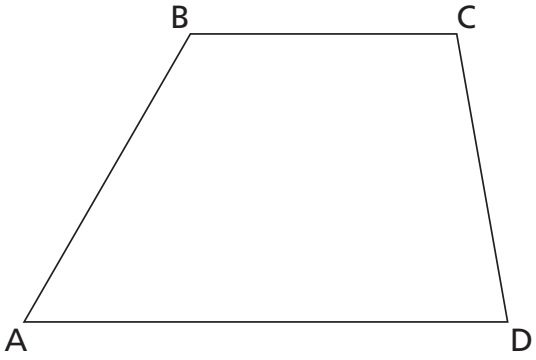
G 31

H 27

J 24

23 Use your protractor to help you solve this problem.

Which angle in the figure below measures 60°?



A $\angle A$

B $\angle B$

C $\angle C$

D $\angle D$

24 Which statement is true?

F $\frac{1}{2} < \frac{1}{4}$

G $\frac{1}{4} > \frac{1}{5}$

H $\frac{2}{10} = \frac{2}{5}$

J $\frac{1}{2} \neq \frac{5}{10}$

25 What rule explains the pattern below?

14, 42, 126, 378, . . .

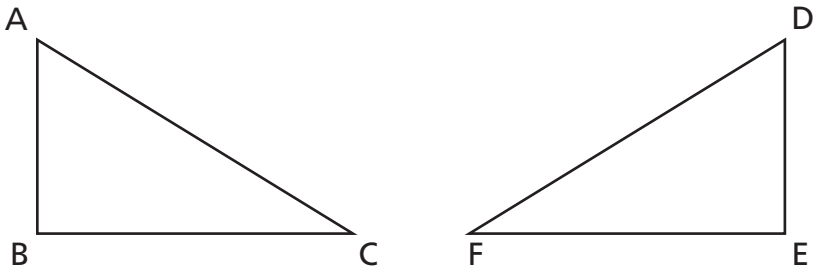
A Multiply by 2.

B Multiply by 3.

C Add 18.

D Add 28.

26 The triangles below are congruent.



Which parts of the triangles are corresponding?

F $\overline{AB}$ and $\overline{DE}$

G $\angle A$ and $\angle E$

H $\overline{BC}$ and $\overline{DF}$

J $\angle B$ and $\angle F$

STOP

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