Aula TEKS Visual Audit

Grade 4 - Operations, Algebra, Area, and Perimeter

Mode: student-facing (no answer key)

Standards: 10

Representative pages: 47

Family/template coverage warnings: 1

This PDF samples every observed deterministic family/template/visual combination and retains difficulty representatives. It is intended for page-by-page visual and mathematical inspection.

4.4(A) - Add and subtract whole numbers and decimals through the hundredths place using the standard algorithm.
Samples: 5

4.4(B) - Determine products of a whole number and 10 or 100 using properties of operations and place-value understanding.
Samples: 5

4.4(C) - Represent the product of two two-digit whole numbers using arrays, area models, or equations, including perfect squares through 15 by 15.
Samples: 5

4.4(D) - Use strategies and algorithms, including the standard algorithm, to multiply up to a four-digit whole number by a one-digit whole number and a two-digit whole number by a two-digit whole number.
Samples: 4

4.4(E) - Represent the quotient of up to a four-digit whole number divided by a one-digit whole number using arrays, area models, or equations.
Samples: 6

4.4(F) - Use strategies and algorithms, including the standard algorithm, to divide up to a four-digit dividend by a one-digit divisor.
Samples: 4

4.4(G) - Estimate solutions involving whole numbers by rounding to the nearest 10, 100, or 1,000 or using compatible numbers.
Samples: 5

4.4(H) - Solve one- and two-step problems involving multiplication and division, including interpreting remainders.
Samples: 4

4.5(A) - Represent multi-step problems with whole numbers using strip diagrams and equations with a letter for the unknown.
Samples: 5
Missing families: multi_step_equation_representation
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4.5(D) - Solve problems related to perimeter and area of rectangles with whole-number dimensions.
Samples: 4

Question 1

The table shows four measured lengths. What is the difference in meters between Item S and Item P?

Measured Lengths	
ITEM	LENGTH (METERS)
P	355.46
Q	355.83
R	1105.66
S	1106.17

A. 740.71 meters

B. 750.72 meters

C. 750.70 meters

D. 750.71 meters

Question 2

What is 18,003 - 7,021?

A. 10,982

B. 10,992

C. 10,972

D. 11,082

Question 3

What is 993.42 - 704.66?

A. 288.75

B. 288.76

C. 288.86

D. 288.66

Question 4

One jump distance measures 1037.07 meters. Another measures 19.8 meters. How much longer is the first jump distance?

A. 1016.27

B. 1017.27

C. 1027.27

D. 1007.27

Question 5

Three groups collected 17,292, 22,378, and 24,534 visitors. How many visitors did the groups collect altogether?

A. 64,203

B. 64,204

C. 64,214

D. 64,194

Question 6

The table shows products by 100. Which row is incorrect?

Products		
ROW	EXPRESSION	PRODUCT
W	208 × 100	20,800
X	211 × 100	21,100
Y	214 × 100	21,400
Z	217 × 100	21,600

A. Row W

B. Row X

C. Row Y

D. Row Z

Question 7

Which row does not follow the multiplication rule?

Products		
ROW	EXPRESSION	PRODUCT
W	990 × 100	99,000
X	995 × 100	99,400
Y	1,000 × 100	100,000
Z	1,005 × 100	100,500

A. Row W

B. Row X

C. Row Y

D. Row Z

Question 8

What is 2,697 × 10?

A. 26,960

B. 26,970

C. 269,700

D. 2,697

Question 9

How many times as large is 144,900 as 1,449?

A. 100 times as large

B. 10 times as large

C. 1,000 times as large

D. 1 time as large

Question 10

Each of 100 trays contains 508 tiles. What is the total number of tiles?

A. 508

B. 508,000

C. 50,800

D. 5,080

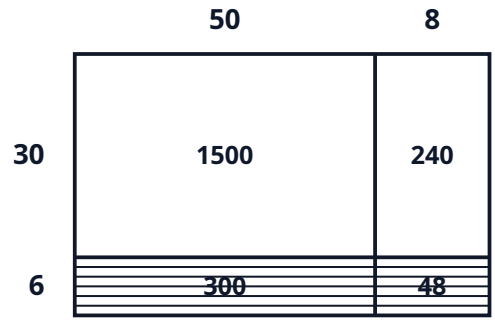
Question 11

Which model correctly decomposes 58 × 35 into partial products?

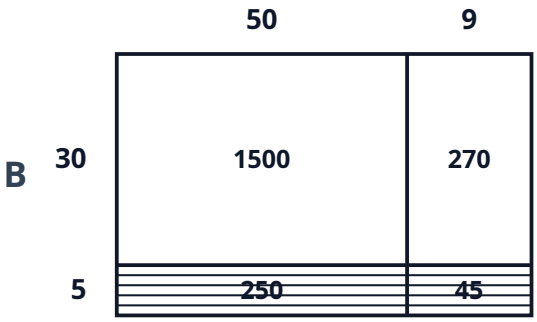
Area Models

Choose the area model that represents 58 × 35.

A



B



A. Model A

B. Model B

C. Model C

D. Model D

Question 12

Which distributive-property equation correctly represents the product of 63 and 88?

A. 63 × 88 = (70 × 88) + (3 × 88)

B. 63 × 88 = (60 × 88) + (3 × 88)

C. 63 × 88 = (6 × 88) + (3 × 88)

D. 63 × 88 = (60 × 88) + (3 × 89)

Question 13

Which distributive-property equation correctly represents the product of 69 and 28?

A. $69 \times 28 = (60 \times 28) + (9 \times 28)$

B. $69 \times 28 = (6 \times 28) + (9 \times 28)$

C. $69 \times 28 = (60 \times 28) + (9 \times 29)$

D. $69 \times 28 = (70 \times 28) + (9 \times 28)$

Question 14

Which equation decomposes one factor to represent 12 × 12?

A. 12 × 12 = (12 × 1) + (12 × 2)

B. 12 × 12 = (12 × 10) + (13 × 2)

C. 12 × 12 = (12 × 20) + (12 × 2)

D. 12 × 12 = (12 × 10) + (12 × 2)

Question 15

Which distributive-property equation can represent 14 × 14?

A. 14 × 14 = (14 × 1) + (14 × 4)

B. 14 × 14 = (14 × 10) + (15 × 4)

C. 14 × 14 = (14 × 20) + (14 × 4)

D. 14 × 14 = (14 × 10) + (14 × 4)

Question 16

There are 8 rows in a garden. Each has 9,986 plants. What is the total number of plants?

A. 79,888

B. 9,994

C. 89,874

D. 69,902

Question 17

Without a written algorithm, use mental math to find 3,000 × 7. What product do you get?

A. 21,000

B. 3,007

C. 24,000

D. 18,000

Question 18

Use the distributive property to multiply 26 by 38. What is the answer?

A. 988

B. 64

C. 1,014

D. 962

Question 19

Use mental math and place value to find 70 × 73. What is the product?

A. 5,110

B. 143

C. 5,180

D. 5,040

Question 20

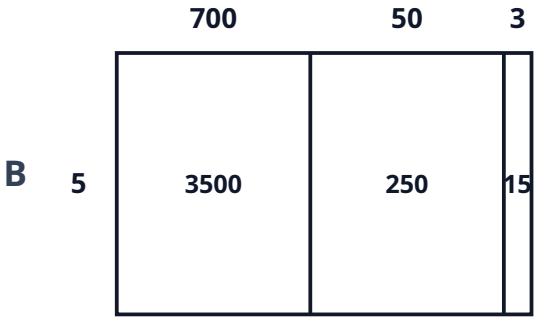
Which area model has an area of 3,765 and a side length of 5, so the other side represents the quotient?

Division Area Models

Choose the area model that represents 3,765 ÷ 5.

A

B



A. Model A

B. Model B

C. Model C

D. Model D

Question 21

6,972 samples are divided equally among 7 trays. Which area model represents the quotient?

Division Area Models

Choose the area model that represents 6,972 ÷ 7.

A

B

A. Model A

B. Model B

C. Model C

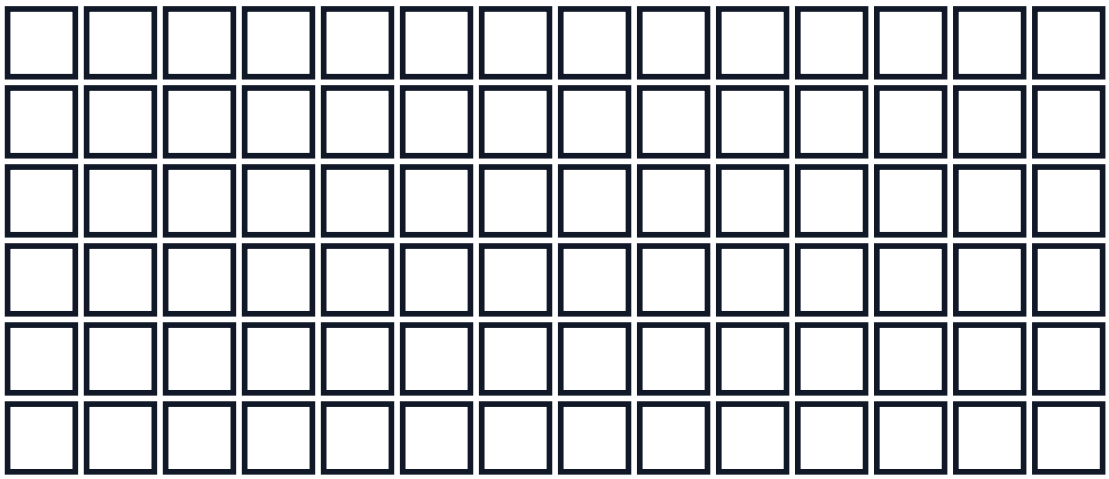
D. Model D

Question 22

A teacher arranges 84 tickets into 6 equal rows. The array models the arrangement. What is the quotient?

Division Array

84 objects are arranged in 6 equal rows.



A. 14

B. 15

C. 13

D. 24

Question 23

Which equation correctly represents the quotient of 1,636 and 4?

A. 1,636 ÷ 4 = 410

B. 1,636 ÷ 4 = 408

C. 1,636 ÷ 4 = 419

D. 1,636 ÷ 4 = 409

Question 24

328 tiles are shared equally among 2 rows. Which equation represents the quotient?

A. $2 \times 164 = 328$

B. $2 \times 165 = 328$

C. $2 \times 163 = 328$

D. $2 \times 174 = 328$

Question 25

Which equation represents the relationship between 1,644, 6, and the quotient?

A. 6 × 274 = 1,644

B. 6 × 275 = 1,644

C. 6 × 273 = 1,644

D. 6 × 284 = 1,644

Question 26

Break apart the dividend by place value to find 632 ÷ 8. What quotient do you get?

A. 79

B. 89

C. 69

D. 80

Question 27

There are 474 flowers split equally among 3 vases. How many are in each group?

A. 158

B. 168

C. 148

D. 159

Question 28

Break apart the dividend by place value to find 96 ÷ 8. What quotient do you get?

A. 12

B. 22

C. 2

D. 13

Question 29

A teacher divides 392 pencils equally among 7 classrooms. How many pencils are in each group?

A. 56

B. 66

C. 46

D. 57

Question 30

The table shows the number of cartons of milk the school cafeteria sold each day last week. Which of these is the best estimate of the number of cartons of milk the cafeteria sold last week?

Milk	
DAY	NUMBER OF CARTONS SOLD
Monday	352
Tuesday	426
Wednesday	449
Thursday	373
Friday	402

A. 400

B. 1,800

C. 2,000

D. 2,500

Question 31

Jorge swam a total of 173 minutes during 3 days. He swam the same number of minutes each day. Which of the following is the best estimate of the number of minutes Jorge swam each day?

A. 60

B. 40

C. 20

D. 30

Question 32

A teacher has 2,394 sheets of paper to share equally among 6 classes. Which is the best estimate of the number of sheets each class will get?

A. 40

B. 400

C. 4,000

D. 14,000

Question 33

A stadium has 48 sections with about 196 seats in each section. Which is the best estimate of the total number of seats?

A. 1,000 seats

B. 5,000 seats

C. 10,000 seats

D. 100,000 seats

Question 34

Jorge swam a total of 173 minutes during 3 days. He swam the same number of minutes each day. Which of the following is the best estimate of the number of minutes Jorge swam each day?

A. 60

B. 40

C. 20

D. 30

Question 35

Fran bought 4 shirts that were $13 each. She also bought a pair of socks for $4.29. What was the total amount Fran paid for the shirts and socks?

A. $21.29

B. $56.29

C. $69.16

D. Not here

Question 36

A school ordered 18 boxes of markers. Each box had 24 markers. The markers were shared equally among 6 grade levels. How many markers did each grade level receive?

A. 62

B. 72

C. 432

D. 42

Question 37

A camp has 137 campers. Each cabin can hold 10 campers. How many cabins are needed for all the campers?

A. 13 cabins

B. 14 cabins

C. 15 cabins

D. 10 cabins

Question 38

Fran bought 4 shirts that were $13 each. She also bought a pair of socks for $4.29. What was the total amount Fran paid for the shirts and socks?

A. $21.29

B. $56.29

C. $69.16

D. Not here

Question 39

There are 187 people on a school trip. There are 152 students. There are 11 teachers. The rest of the people on the trip are parents. Which representations can be used to find the number of parents, p, on the school trip? Select TWO correct answers.

Visual answer choices are unavailable because their A–D labels are incomplete or contradictory.

A. Representation A

B. p = 187 - 152 - 11

C. p = 187 + 152 + 11

D. Representation D

E. Representation E

Question 40

There are 187 people on a school trip. There are 152 students. There are 11 teachers. The rest of the people on the trip are parents. Which representations can be used to find the number of parents, p, on the school trip? Select TWO correct answers.

Visual answer choices are unavailable because their A–D labels are incomplete or contradictory.

A. Representation A

B. p = 187 - 152 - 11

C. p = 187 + 152 + 11

D. Representation D

E. Representation E

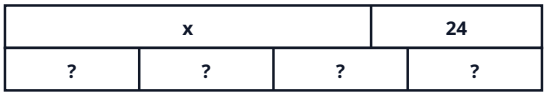
Question 41

Lena started with x stickers and bought 24 more. The total was then split into 4 equal groups. Which strip diagram best represents the number of stickers in each group?

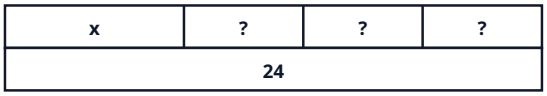
Which strip diagram represents the situation?

Choose the diagram that shows the total made from x and 24, then split into 4 equal groups.

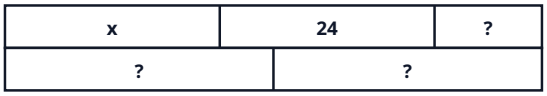
A Diagram A



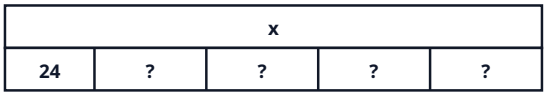
B Diagram B



C Diagram C



D Diagram D



A. Diagram A

B. Diagram B

C. Diagram C

D. Diagram D

Question 42

Kenji makes 24 cupcakes. He eats 3 of them and gives 12 to his friends. Which strip diagram best represents c, the number of cupcakes Kenji has left?

Which strip diagram represents the situation?

Choose the diagram that shows 24 total cupcakes split into 3 eaten, 12 given away, and c left.

A Diagram A

B Diagram B

C Diagram C

D Diagram D

A. Diagram A

B. Diagram B

C. Diagram C

D. Diagram D

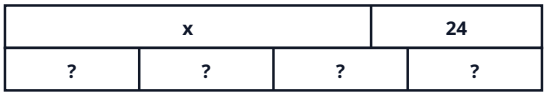
Question 43

Lena started with x stickers and bought 24 more. The total was then split into 4 equal groups. Which strip diagram best represents the number of stickers in each group?

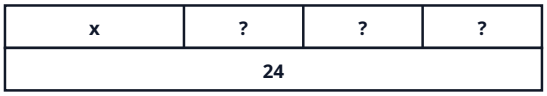
Which strip diagram represents the situation?

Choose the diagram that shows the total made from x and 24, then split into 4 equal groups.

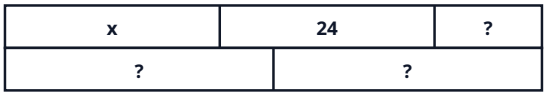
A Diagram A



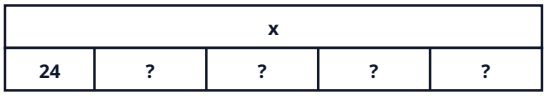
B Diagram B



C Diagram C



D Diagram D



A. Diagram A

B. Diagram B

C. Diagram C

D. Diagram D

Question 44

The table shows the dimensions of rectangular playground sections. Which section has an area of 70 square feet?

Playground Sections		
SECTION	LENGTH	WIDTH
A	16 ft	4 ft
B	17 ft	3 ft
C	14 ft	5 ft
D	19 ft	3 ft

A. Section A

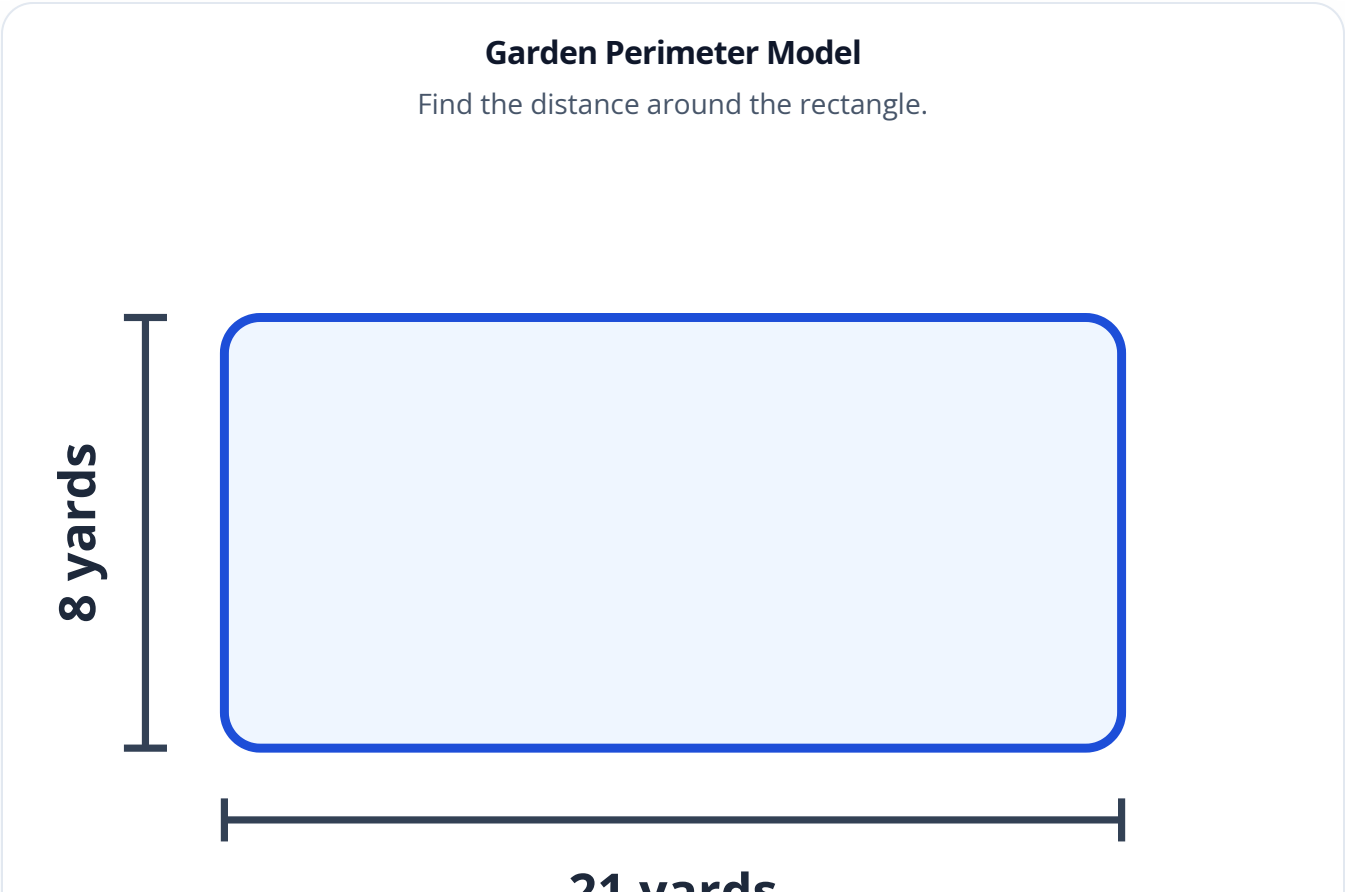
B. Section B

C. Section C

D. Section D

Question 45

A rectangular playground sandbox is 21 yards long and 8 yards wide. What is the perimeter of the playground sandbox?



A. 58 yd

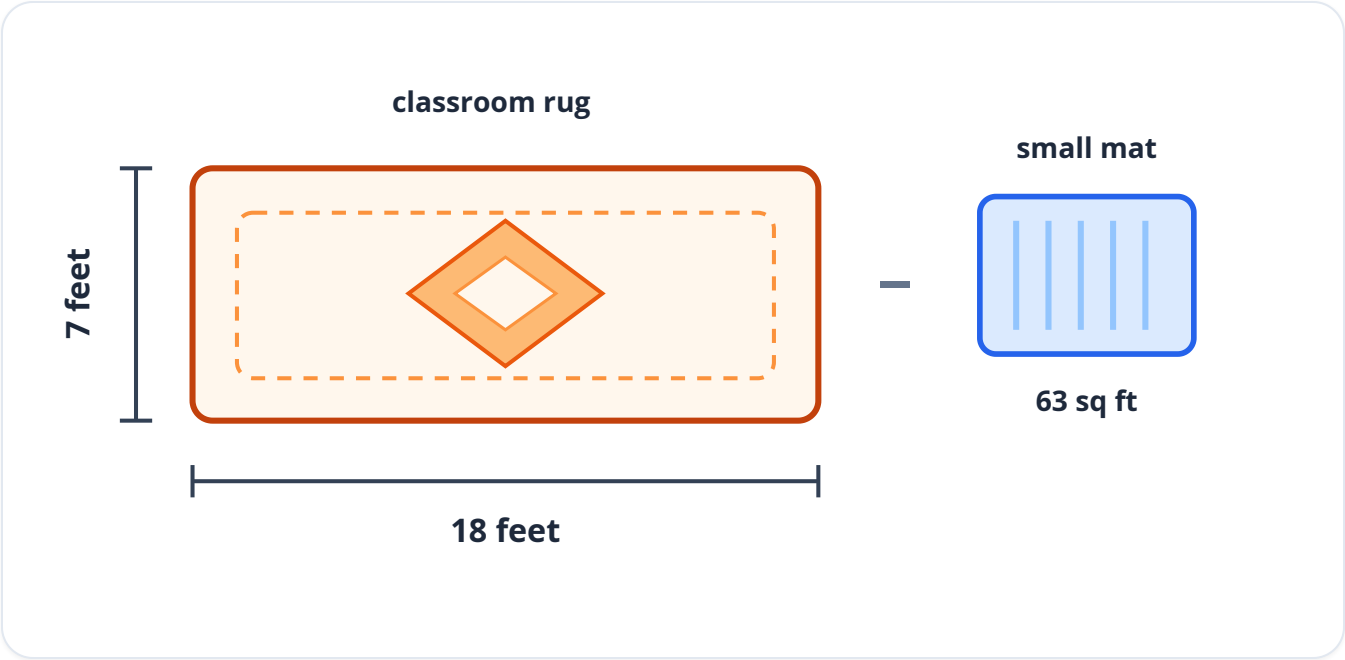
B. 58 yd (1)

C. 58 yd (2)

D. 58 yd (3)

Question 46

A rectangular classroom rug is 18 feet long and 7 feet wide. A smaller rectangular mat has an area of 63 square feet. How much greater is the area of the rug than the area of the mat?



A. 63 square feet

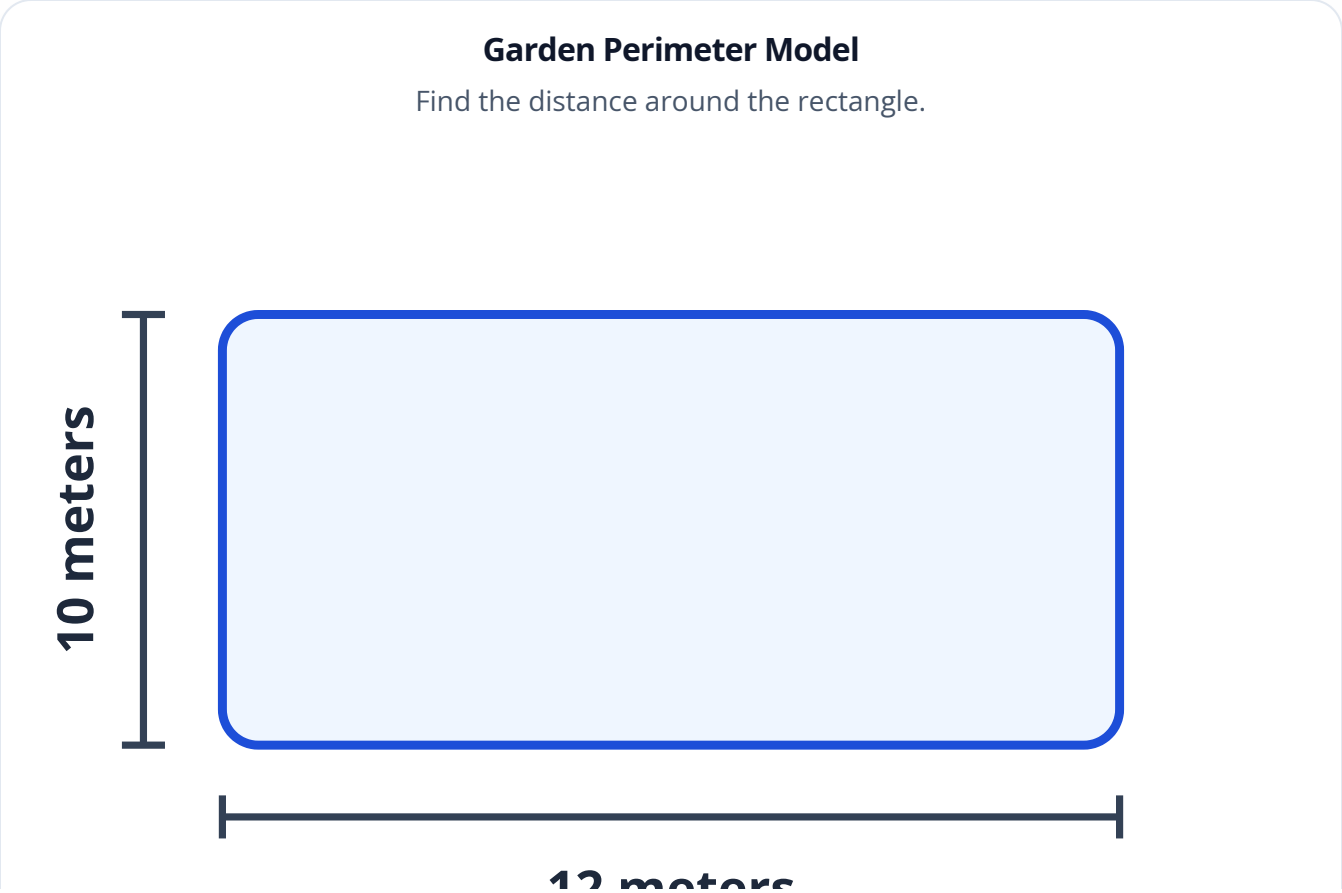
B. 63 square feet (1)

C. 63 square feet (2)

D. 63 square feet (3)

Question 47

A rectangular playground sandbox is 12 meters long and 10 meters wide. What is the perimeter of the playground sandbox?



A. 44 m

B. 44 m (1)

C. 44 m (2)

D. 44 m (3)