STAAR

State of Texas Assessments of Academic Readiness

MATHEMATICS
Grade 5

2015 Released Test Questions

1   The table shows the masses of four rocks.

Rocks

Rock	Mass (kg)
S	0.429
T	0.438
U	0.43
V	0.483

Which number sentence correctly compares the masses of two of the rocks?

A $0.429 > 0.438$

B $0.438 < 0.483$

C $0.429 > 0.43$

D $0.438 = 0.43$

2   An expression is given.

$$3 \times (8 + 2) \div 2$$

Which statement is true about the parentheses in this expression?

A   The parentheses indicate that $8 + 2$ should be solved first.

B   The parentheses indicate that $8 + 2$ should be solved last.

C   The parentheses indicate that $2 \div 2$ should be solved last.

D   The parentheses indicate that 3×8 should be solved first.

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3   What is the value of this expression?

$$[36 + (3 \times 2)] \div 6$$

A   7

B   37

C   13

D   42

4 The hundredths model in the figure is shaded to represent the multiplying of two numbers.
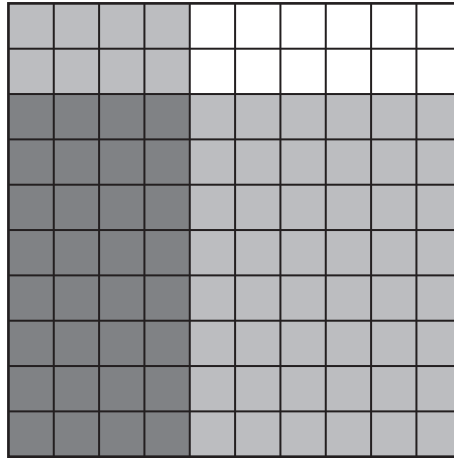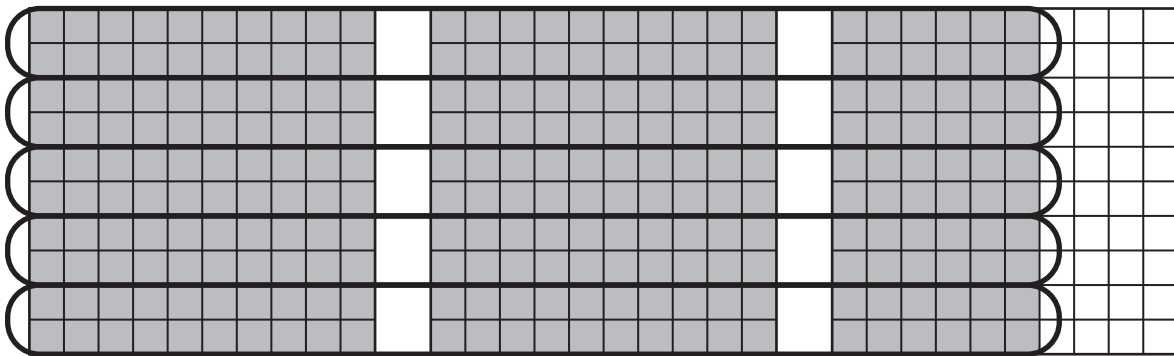

Which equation can be represented by the shaded parts of the model?

A $80 \times 40 = 3{,}200$

B $0.08 \times 0.04 = 0.32$

C $0.80 \times 0.40 = 0.32$

D $0.08 \times 0.04 = 0.032$

5 Denise spent $3.45 on snacks every day for 11 days. What is the amount of money Denise spent on these snacks?

A $379.50

B $14.45

C $37.95

D $6.90

6　The model is shaded to represent two and sixty-hundredths.
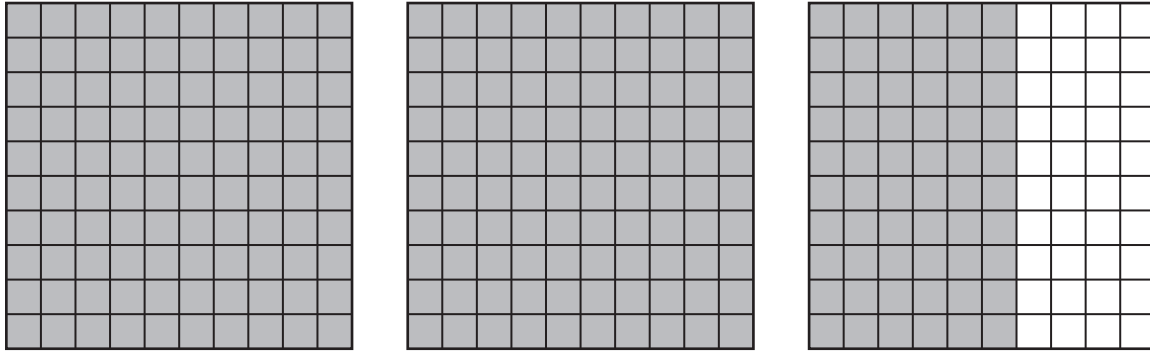

This model represents an equation.

Which equation is represented by this model?

A　$2.50 \times 5 = 12.5$

B　$2.60 \div 5 = 0.52$

C　$52 \times 5 = 260$

D　$2.06 \div 5 = 0.412$

7 Anthony has a goal of saving $96.20. He will save the same amount each week for 13 weeks. How much will Anthony need to save each week in order to meet his goal?

  A $7.40

  B $7.52

  C $7.04

  D $7.31

8 Mrs. Ali collected notebook paper from her students at the beginning of the school year. The model is shaded to show the fraction of this notebook paper that Mrs. Ali used in each of the three months.

First month

Second month

Third month
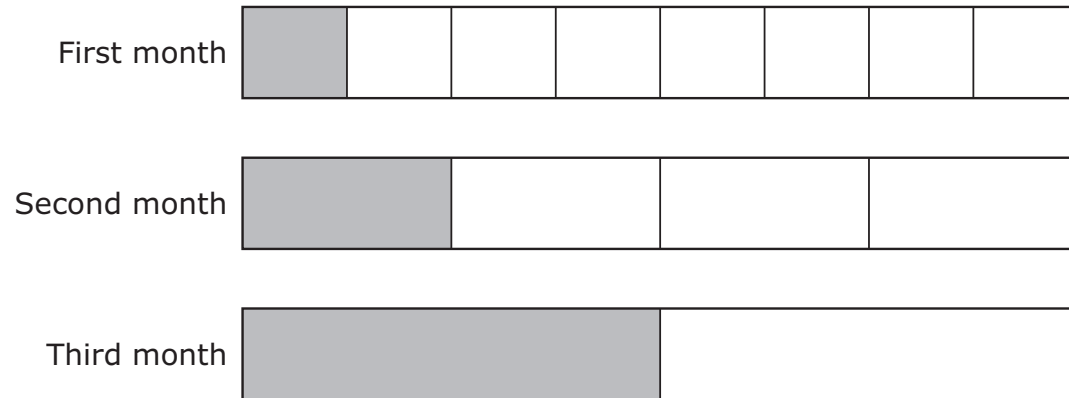
What fraction of the notebook paper Mrs. Ali collected was used during these three months?

A $\dfrac{3}{8}$

B $\dfrac{7}{8}$

C $\dfrac{3}{14}$

D $\dfrac{1}{8}$

9 Weather delayed $\frac{4}{6}$ of the 24 flights departing from an airport. All the departing flights are listed in the chart.

Departing Flights

Flight #48	Flight #111	Flight #90	Flight #38
Flight #112	Flight #222	Flight #134	Flight #46
Flight #23	Flight #564	Flight #56	Flight #116
Flight #12	Flight #72	Flight #765	Flight #677
Flight #17	Flight #86	Flight #89	Flight #422
Flight #65	Flight #329	Flight #88	Flight #499

How many flights departing from the airport were delayed by weather?

A 18

B 4

C 16

D 8

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10 The regular price of a calculator is $12.30. Warren paid 75¢ less than the regular price for the calculator. He also paid $1.48 for a pad of paper. What is the total amount Warren paid for these two items?

A $13.03

B $14.03

C $14.53

D $13.83

11 Malia had 15 lb of birdseed. She fed her birds $\frac{1}{5}$ lb of birdseed every day until all the birdseed was gone. For how many days did Malia feed the birdseed to her birds?

A 20 days

B 3 days

C 90 days

D 75 days

12 Pedro ordered 24 boxes of baseballs. Each box contained 16 baseballs. Pedro used 8 of these baseballs during a game. Which equation can be used to find b, the total number of these baseballs that Pedro did not use during the game?

A $b = (24 + 16) - 8$

B $b = (24 \times 16) - 8$

C $b = (24 - 16) \div 8$

D $b = (24 \times 16) + 8$

13 The ordered pairs for the points on the coordinate plane satisfy the equation $y = x + 3$.
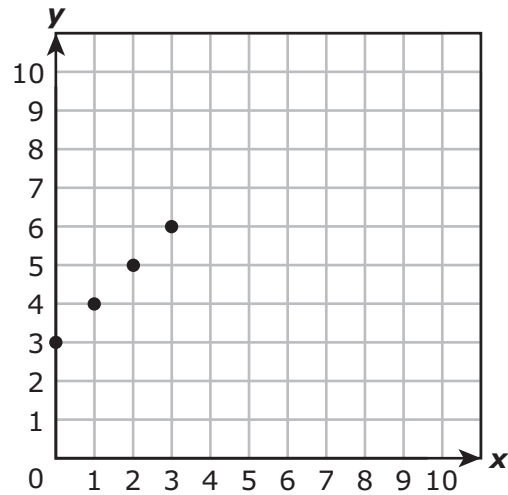
Which of these tables shows other points that satisfy the equation $y = x + 3$?

A

x	4	7	10	13
y	6	9	12	15

C

x	9	12	15	18
y	12	15	18	21

B

| x	12	15	18	21
y	9	12	15	18

D None of these

14 The base of a rectangular prism has a length of 15 inches and a width of 13 inches. What is the area of this base of the prism in square inches?

Record your answer and fill in the bubbles on your answer document. Be sure to use the correct place value.

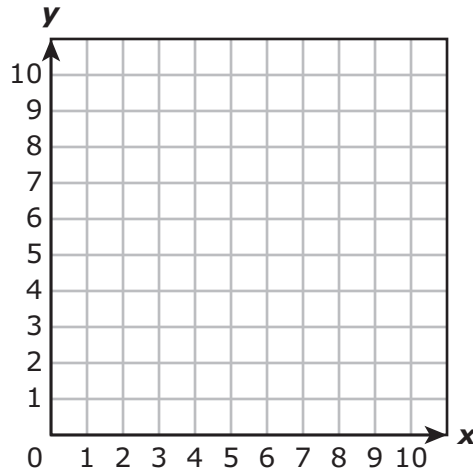**15** Alex filled out a graphic organizer about polygons. Here is a section of his graphic organizer.
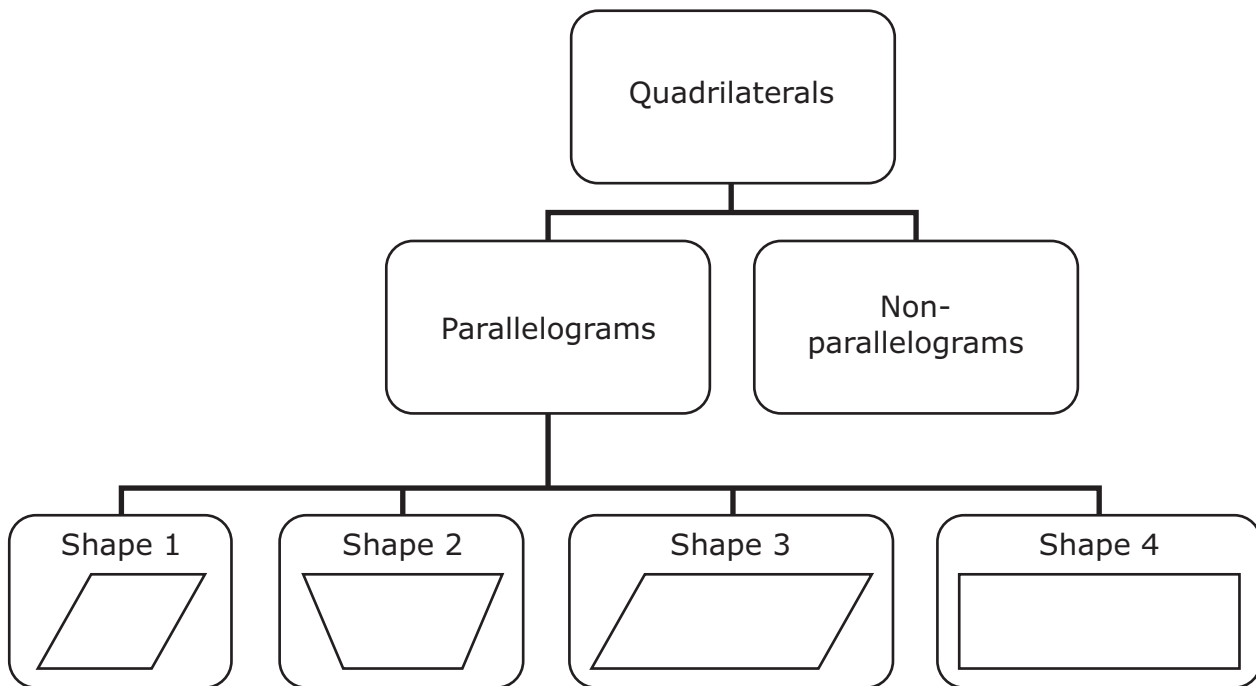
Which shapes appear to be classified correctly?

A Shapes 1 and 3 only

B Shapes 2 and 4

C Shapes 1, 2, and 3

D Shapes 1, 3, and 4

16 The ordered pairs below represent three vertices of a trapezoid.
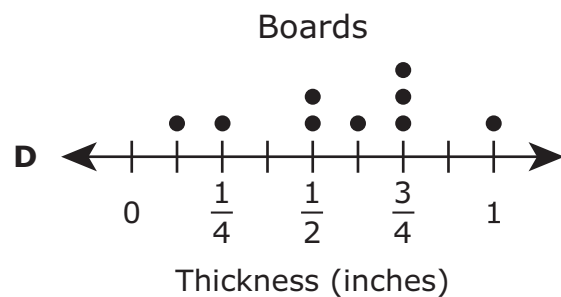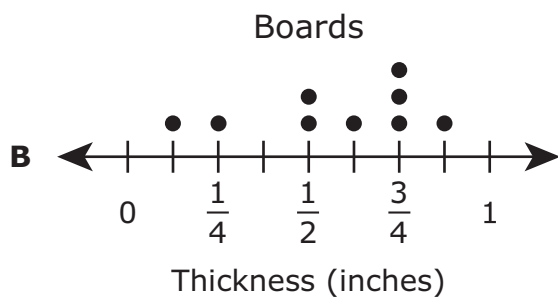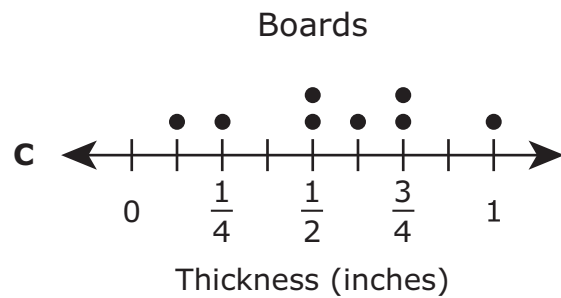
$$(2, 1),\ (4, 4),\ (4, 6)$$

Which ordered pair could represent the location of the fourth vertex of this trapezoid?

A (4, 5)

B (10, 9)

C (2, 9)

D (4, 1)

17 The thicknesses of the boards Dennis used for a construction project are listed below. These measurements are in inches.

$$\frac{1}{4},\ \frac{3}{4},\ \frac{1}{2},\ \frac{3}{4},\ \frac{1}{8},\ 1,\ \frac{5}{8},\ \frac{3}{4},\ \frac{1}{2}$$

Which dot plot represents these measurements?

A

Boards

Thickness (inches)

C

Boards

Thickness (inches)

B

Boards

Thickness (inches)

D

Boards

Thickness (inches)

18 The table shows the amount of time eight thunderstorms lasted and the amount of rainfall each thunderstorm produced.

Thunderstorm Data
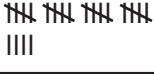
Amount of Time, x (hours)	1	2	3	2	1	4	3	2
Amount of Rainfall, y (inches)	5	8	11	6	4	14	8	10

Which scatterplot best represents the data?

A

Thunderstorm Data

C

Thunderstorm Data

B

Thunderstorm Data

D

Thunderstorm Data
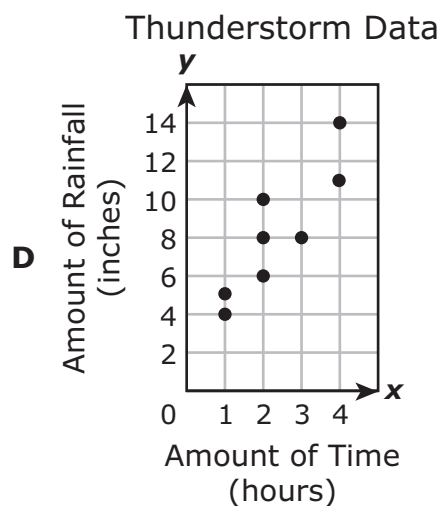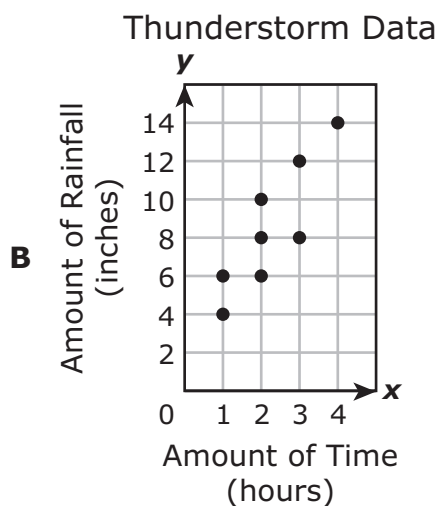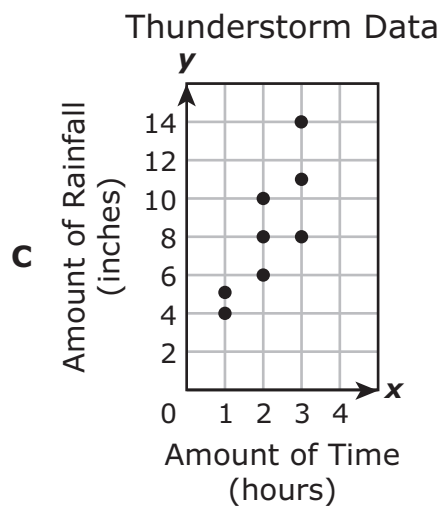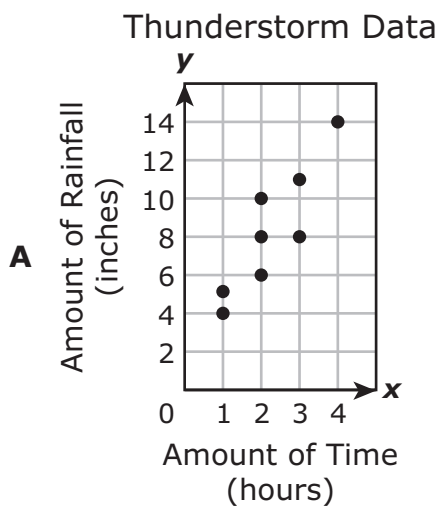
19 The frequency table shows the colors that fifth graders preferred for their school shirts.

Fifth-Grade Shirts

Color	Tally	Frequency
Red	~~HHH~~ ~~HHH~~ ~~HHH~~ ~~HHH~~ ~~HHH~~ ~~HHH~~ II	32
Blue	~~HHH~~ ~~HHH~~ ~~HHH~~ ~~HHH~~ ~~HHH~~ ~~HHH~~ ~~HHH~~	35
Green	~~HHH~~ ~~HHH~~ ~~HHH~~ ~~HHH~~ IIII	24
Orange	~~HHH~~ ~~HHH~~ ~~HHH~~ III	18
Purple	~~HHH~~ ~~HHH~~ ~~HHH~~ ~~HHH~~ ~~HHH~~ ~~HHH~~ ~~HHH~~ III	38

Based on the data in the table, how many students preferred the three colors that had the highest frequencies?

A 38

B 91

C 147

D 105

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20 Ms. Parvin pays a tax every year because she owns a house. Which term best describes this tax?

A Income tax

B Payroll tax

C Sales tax

D Property tax

21 Which of these statements about gross income and net income is true?

  A Gross income is a tax on all income that a worker earns, and net income is a tax paid by an employer based on a worker's wages.

  B Gross income is a tax paid by an employer based on a worker's wages, and net income is a tax on all income that a person earns.

  C Gross income is the amount an employee is paid after deductions and taxes, and net income is the total amount an employee earns before deductions are applied.

  D Gross income is the total amount an employee earns before deductions are applied, and net income is the amount an employee is paid after deductions and taxes.

22 This month Mando's expenses are greater than his income. What are two actions Mando can take in order to balance his budget?

  A Increase expenses and decrease income

  B Decrease expenses and decrease income

  C Decrease expenses and increase income

  D Increase expenses and increase income

23 Ms. Vonn's monthly budget is shown in the chart. She receives two paychecks per month.

Ms. Vonn's Budget

Income	Expenses
Work paycheck $1,200	House payment $900
Work paycheck $1,200	Car payment ....
	Utilities $350
	Groceries $250
	Gas $200
	Insurance $150
	Retirement savings $250

Ms. Vonn's budget is balanced every month. How much is Ms. Vonn's monthly car payment?

A $2,400

B $300

C $500

D $2,100

Item Number	Correct Answer	Reporting Category	Readiness or Supporting	Content Student Expectation	Process Student Expectation
1	B	1	Readiness	5.2(B)	5.1 (A),(B),(E),(F)
2	A	1	Supporting	5.4(E)	5.1 (B),(G)
3	A	1	Readiness	5.4(F)	5.1 (B),(F)
4	C	2	Supporting	5.3(D)	5.1 (B),(D),(F)
5	C	2	Readiness	5.3(E)	5.1 (A),(B),(F)
6	B	2	Supporting	5.3(F)	5.1 (B),(D),(F)
7	A	2	Readiness	5.3(G)	5.1 (A),(B),(F)
8	B	2	Supporting	5.3(H)	5.1 (A),(B),(E),(F)
9	C	2	Supporting	5.3(I)	5.1 (A),(B),(E),(F)
10	A	2	Readiness	5.3(K)	5.1 (A),(B),(F)
11	D	2	Readiness	5.3(L)	5.1 (A),(B),(F)
12	B	2	Readiness	5.4(B)	5.1 (A),(B),(D),(F)
13	C	2	Readiness	5.4(C)	5.1 (B),(D),(F)
14	195	3	Readiness	5.4(H)	5.1 (B),(C),(F)
15	D	3	Readiness	5.5(A)	5.1 (A),(B),(E),(F)
16	C	3	Readiness	5.8(C)	5.1 (B),(E),(F)
17	D	4	Supporting	5.9(A)	5.1 (A),(B),(D),(F)
18	A	4	Supporting	5.9(B)	5.1 (A),(B),(D),(F)
19	D	4	Readiness	5.9(C)	5.1 (A),(B),(E),(F)
20	D	4	Supporting	5.10(A)	5.1 (A),(F)
21	D	4	Supporting	5.10(B)	5.1 (G)
22	C	4	Supporting	5.10(E)	5.1 (A),(B),(G)
23	B	4	Supporting	5.10(F)	5.1 (A),(B),(E),(F)