STAAR 2.0 Transitional Items

Math Grade 7

The lead4ward transitional items are designed to provide teachers and leaders with examples of how released multiple-choice items could look in the format of the STAAR 2.0 new item types. The lead4ward crew has adapted elementary and secondary items in various TEKS clusters for STAAR-tested courses. Within those TEKS clusters, new item types that are applicable to the specific grade and subject are represented.

The transitional items can be used with the PLC:

- when planning for application of learning and transfer to STAAR
- to analyze and discuss the STAAR 1.0 and 2.0 examples, including:
  - the similarities and differences between multiple-choice and new item type thinking, stimuli, and representation of the content
  - how the new item types may be better or more challenging for students
  - student misconceptions and mistakes
  - how specific online tools and resources may support particular new item types

The transitional items can also be used with students during instruction:

- as prompts for bell ringers, modeling with assessment items, analysis and discussion in centers or workstations, and with Learning from Mistakes strategies on the lead4ward playlist
- to analyze and discuss the STAAR 1.0 and 2.0 examples, including:
  - the similarities and differences between multiple-choice and new item type thinking, stimuli, and representation of the content
  - how the new item types may be better or more challenging
  - possible learning mistakes
  - how specific online tools may support particular new item types

Grade 7

Proportional Reasoning

STAAR Released Item

7.4(A) 2017 item 9
[Constant Rate of Change]

Which of these does NOT represent the distance a car travels when going 55 miles per hour?

A $d = 55t$, where d represents distance in miles and t represents time in hours

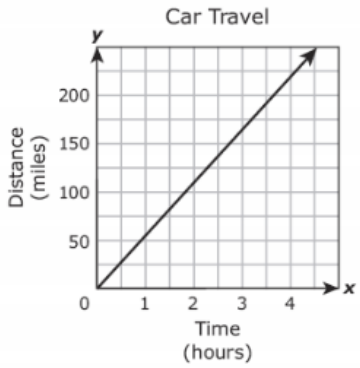
B

Car Travel

Time (hours)	Distance (miles)
1	55
1.5	82.5
2	110
2.5	137.5

C In 3 hours a car will travel a distance of 160 miles.

D



Multiselect

Which of these represent the distance a car travels when going 55 miles per hour?

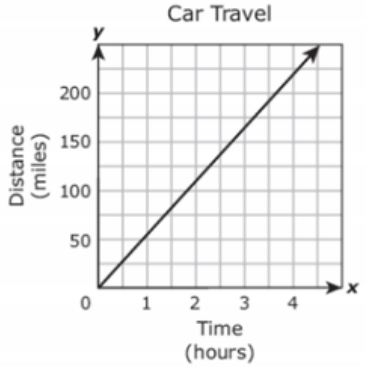
Select **THREE** correct answers.

- ☐ $d = 55t$, where d represents distance in miles and t represents time in hours
- ☐

Car Travel

Time (hours)	Distance (miles)
1	55
1.5	82.5
2	110
2.5	137.5

- ☐ In 3 hours a car will travel a distance of 160 miles.
- ☐

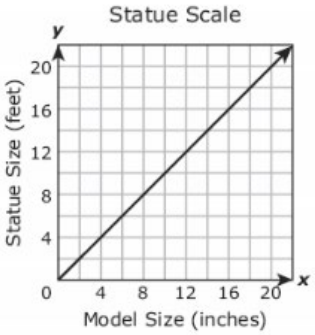


STAAR Released Item

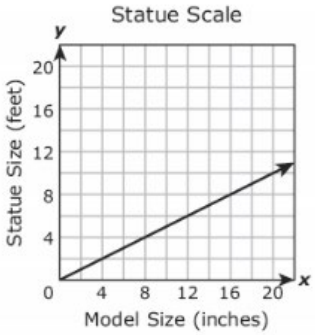
7.4(A) 2017 item 25
[Constant Rate of Change]

An artist is making a scale model of a statue. On the model 2 inches represents 1 foot on the actual statue. Which graph best represents this relationship?

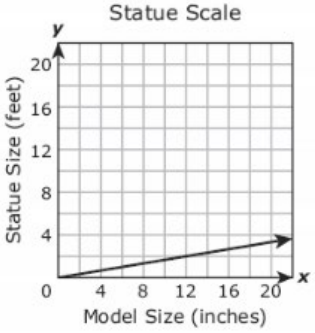
A



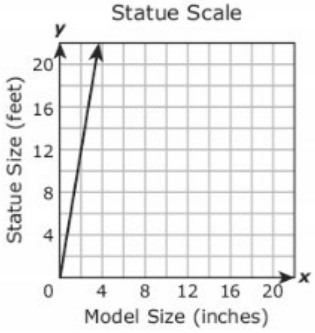
C



B



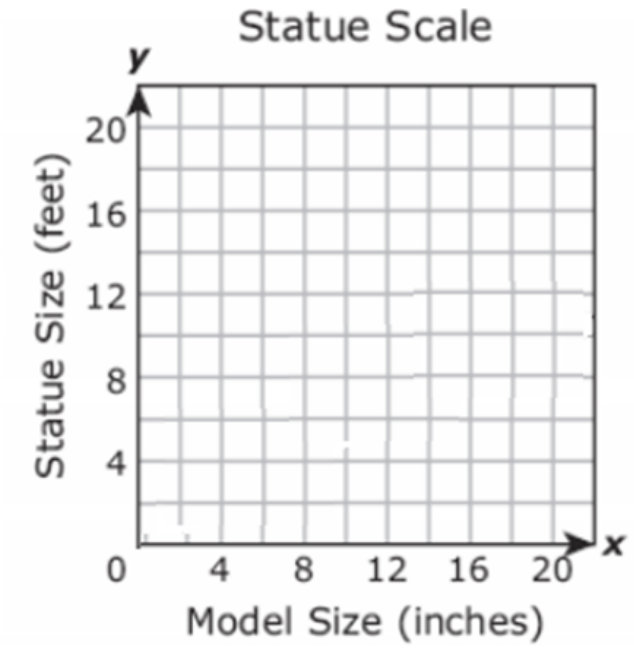
D



Graphing

An artist is making a scale model of a statue. On the model 2 inches represents 1 foot on the actual statue.

Select two points on the coordinate grid. A line will connect the points.



STAAR Released Item

7.4(B) 2019 item 36
[Constant Rate of Change]

A worker uses 450 inches of steel wire to make 300 springs of the same size. At this rate how many inches of steel wire are needed to make 1 spring?

F $\frac{1}{3}$ in.

G $\frac{1}{15}$ in.

H $\frac{2}{3}$ in.

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

Equation Editor/Text Entry

A worker uses 450 inches of steel wire to make 300 springs of the same size. At this rate how many inches of steel wire are needed to make 1 spring?

Enter your answer in the space provided.

STAAR Released Item

7.4(C) 2019 item 29
[Constant Rate of Change]

At a school carnival, tickets can be purchased to participate in different activities. The table shows the total cost for different numbers of tickets.

School Carnival

Number of Tickets, x	Total Cost, y (dollars)
8	2.00
12	3.00
20	5.00
30	7.50
50	12.50

What is the constant of proportionality that relates y, the total cost in dollars, to x, the number of tickets purchased?

A 4.00

B 0.25

C 1.00

D 0.10

Equation Editor/Text Entry

At a school carnival, tickets can be purchased to participate in different activities. The table shows the total cost for different numbers of tickets.

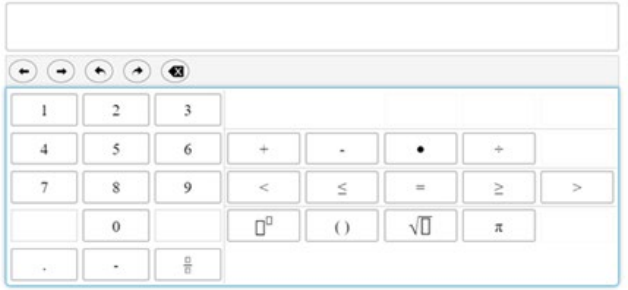
School Carnival

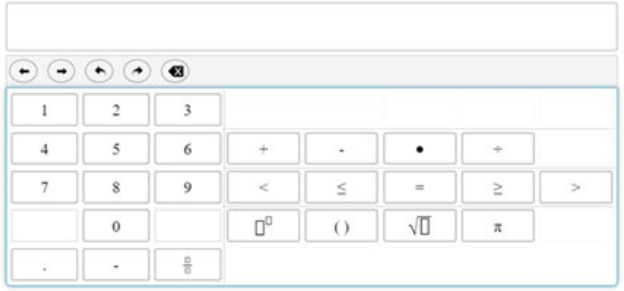
Number of Tickets, x	Total Cost, y (dollars)
8	2.00
12	3.00
20	5.00
30	7.50
50	12.50

What is the constant of proportionality that relates y, the total cost in dollars, to x, the number of tickets purchased?

Enter your answer in the space provided.

STAAR Released Item	Equation Editor/Text Entry
7.4(C) 2015 item 7 [Constant Rate of Change] The cost of 3 pounds of grapes is $6.57. What is the constant of proportionality that relates the cost in dollars, *y*, to the number of pounds of grapes, *x*? **A** 6.57 **B** 3 **C** 2.19 **D** Not here	The cost of 3 pounds of grapes is $6.57. What is the constant of proportionality that relates how the cost in dollars, *y*, to the number of pounds of grapes, *x*? Enter your answer in the space provided. 
7.4(D) 2021 item 18 [Ratios/Rates/Percentages] The owner of a bookstore buys used books from customers for $1.50 each. The owner then resells the used books for 400% of the amount he paid for them. What is the price of a used book in this bookstore? **F** $5.50 **G** $4.00 **H** $2.10 **J** $6.00	The owner of a bookstore buys used books from customers for $1.50 each. The owner then table resells the used books for 400% of the amount he paid for them. What is the price of a used book in this bookstore? Enter your answer in the space provided. 

STAAR Released Item	Equation Editor/Text Entry
7.4(D) 2021 item 38 [Ratios/Rates/Percentages] A recipe for fruit salad includes $\frac{1}{3}$ cup of grapes for 4 servings. How many cups of grapes are needed for 30 servings of this fruit salad? **F** 10 c **G** 40 c **H** $2\frac{1}{2}$ c **J** $7\frac{1}{2}$ c	A recipe for fruit salad includes $\frac{1}{3}$ cup of grapes for 4 servings. How many cups of grapes are table needed for 30 servings of this fruit salad? Enter your answer in the space provided. 
STAAR Released Item	**Equation Editor/Text Entry**
7.4(D) 2018 item 9 [Ratios/Rates/Percentages] The ratio of boys to girls in Ms. Cunningham's class is 2 to 3. There are 18 girls in the class. What is the total number of students in Ms. Cunningham's class? **A** 12 **B** 30 **C** 45 **D** 27	The ratio of boys to girls in Ms. Cunningham's class is 2 to 3. There are 18 girls in the class. What is the total number of students in Ms. Cunningham's class? Enter your answer in the space provided. 

STAAR Released Item	Equation Editor/Text Entry
7.4(D) 2018 item 26 [Ratios/Rates/Percentages] Russell has a collection of 1,200 pennies. Of these pennies, 25% are dated before 1980, 35% are dated from 1980 to 2000, and the rest are dated after 2000. How many pennies in Russell's collection are dated after 2000? **F** 480 **G** 720 **H** 40 **J** 60	Russell has a collection of 1,200 pennies. Of these pennies, 25% are dated before 1980, 35% are dated from 1980 to 2000, and the rest are dated after 2000. How many pennies in Russell's collection are dated after 2000? Enter your answer in the space provided. 
STAAR Released Item	**Equation Editor/Text Entry**
7.4(D) 2017 item 14 [Ratios/Rates/Percentages] The price of a video game was reduced from $60 to $45. By what percentage was the price of the video game reduced? **F** 15% **G** 25% **H** 75% **J** 40%	The price of a video game was reduced from $60 to $45. By what percentage was the price of the video game reduced? Enter your answer in the space provided. 

STAAR Released Item	Equation Editor/Text Entry
7.4(D) 2017 item 21 [Ratios/Rates/Percentages] Kiara downloaded 264 pictures from her cell phone to her computer. These pictures took up 528 megabytes of space on her computer. Each picture took up the same amount of space. How many megabytes do 35 of these pictures take up? **A** 18 MB **B** 70 MB **C** 8 MB **D** 23 MB	Kiara downloaded 264 pictures from her cell phone to her computer. These pictures took up 528 megabytes of space on her computer. Each picture took up the same amount of space. How many megabytes do 35 of these pictures take up? Enter your answer in the space provided. 

STAAR Released Item	Equation Editor/Text Entry
7.4(E) 2016 item 24 [Conversions] Chloe is 5 feet 4 inches tall. There are 2.54 centimeters in 1 inch. What is Chloe's height in centimeters? **F** 56.54 cm **G** 13.72 cm **H** 162.56 cm **J** 152.40 cm	Chloe is 5 feet 4 inches tall. There are 2.54 centimeters in 1 inch. What is Chloe's height in centimeters? Enter your answer in the space provided. 

STAAR Released Item

7.7(A) 2018 item 24
[Conceptual Development of Non-Proportional Reasoning]

A fish is swimming at a constant rate toward the ocean floor. The equation $y = -7x - 3$ can be used to represent this situation, where y is the depth of the fish in meters below sea level and x is the number of seconds the fish has been swimming.

Which statement best describes the depth of the fish, given this equation?

F From a starting position of 7 meters below sea level, the fish is descending 3 meters per second.

G From a starting position of 7 meters below sea level, the fish is ascending 3 meters per second.

H From a starting position of 3 meters below sea level, the fish is descending 7 meters per second.

J From a starting position of 3 meters below sea level, the fish is ascending 7 meters per second.

Inline Choice

A fish is swimming at a constant rate toward the ocean floor. The equation $y = -7x - 3$ can be used to represent this situation, where y is the depth of the fish in meters below sea level and x is the number of seconds the fish has been swimming.

Choose the correct answer from each drop-down menu to complete the statement that describes the depth of the fish, give the equation y = -7x – 3.

From a starting position of [Choose...] meters below sea level,
- 3
- 7

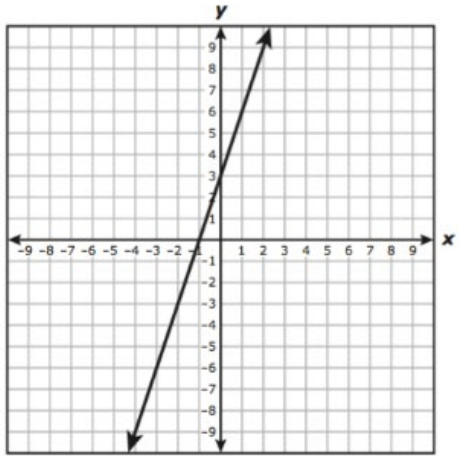
the fish is [Choose...] [Choose...] meters per second.

ascending	3
descending	7

STAAR Released Item

7.7(A) 2016 item 27
[Conceptual Development of Non-Proportional Reasoning]

Which equation best represents the relationship between x and y in the graph?



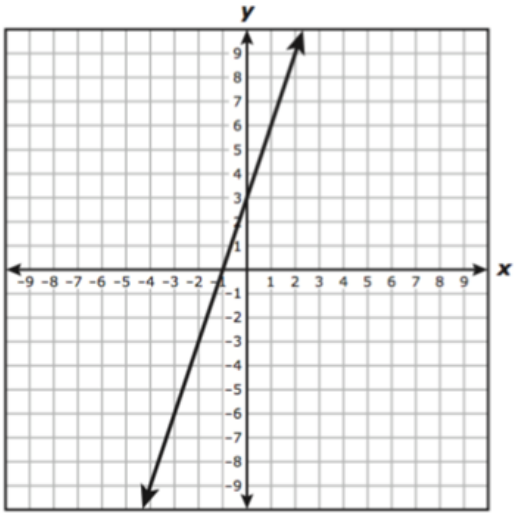
A $y = 3x + 3$

B $y = 3x - 1$

C $y = \frac{1}{3}x + 3$

D $y = \frac{1}{3}x - 1$

Drag and Drop



Complete the equation to represent the relationship between x and y in the graph.

Move the correct answer to each box. Answers may be used more than once.

1/3	3	-1

$y =$ ☐ $x +$ ☐

STAAR Released Item

7.7(A) 2016 item 47
[Conceptual Development of Non-Proportional Reasoning]

Which table contains only values that satisfy the equation $y = 0.5x + 14$?

A

x	y
0	0
5	35
10	70
15	105
20	140

C

x	y
0	14
5	16.5
10	19
15	21.5
20	24

B

x	y
0	14
5	39
10	64
15	89
20	114

D

x	y
0	14
5	14.5
10	15
15	15.5
20	16

Drag and Drop

Complete the table that satisfy the equation of y = 0.5x + 14.

x	y
0	14
5	16.5
	19
15	21.5
20	

Move the correct answer to each box. Not all answers will be used.

10 | 14 | 15 | 24 | 114 | 140

Grade 7

Probability

STAAR Released Item

7.6(C) 2019 item 7
[Application of Probability]

Vincent flipped three coins during a probability experiment. The outcomes of the first 40 trials are shown in the table.

Probability Experiment

Faces Showing on Flipped Coins	Number of Outcomes
3 tails	4
1 head, 2 tails	13
2 heads, 1 tail	16
3 heads	7

Based on the information in the table, in how many of the next 120 trials will the outcome be exactly two of the coins showing heads?

A 60

B 87

C 39

D 48

Equation Editor/Text Entry

Vincent flipped three coins during a probability experiment. The outcomes of the first 40 trials are shown in the table.

Probability Experiment

Faces Showing on Flipped Coins	Number of Outcomes
3 tails	4
1 head, 2 tails	13
2 heads, 1 tail	16
3 heads	7

Based on the information in the table, in how many of the next 120 trials will the outcome be exactly two of the coins showing heads?

Enter your answer in the space provided.

STAAR Released Item

7.6(E) 2021 item 17
[Determination of Probability]

A teacher has a container of paper clips. She will randomly select one paper clip from the container.

- The container has 8 pink paper clips.
- The container has 14 purple paper clips.
- The container has 12 yellow paper clips.
- The container has 16 blue paper clips.

Which statement is true?

A The probability of selecting a purple paper clip is $\frac{3}{4}$, and the probability of selecting a paper clip that is not purple is $\frac{1}{4}$.

B The probability of selecting a purple paper clip is $\frac{1}{4}$, and the probability of selecting a paper clip that is not purple is $\frac{3}{4}$.

C The probability of selecting a purple paper clip is $\frac{18}{25}$, and the probability of selecting a paper clip that is not purple is $\frac{7}{25}$.

D The probability of selecting a purple paper clip is $\frac{7}{25}$, and the probability of selecting a paper clip that is not purple is $\frac{18}{25}$.

Inline Choice

A teacher has a container of paper clips. She will randomly select one paper clip from the container.

- The container has 8 pink paper clips.
- The container has 14 purple paper clips.
- The container has 12 yellow paper clips.
- The container has 16 blue paper clips.

Choose the correct answer from each drop-down menu to complete the statement.

The probability of selecting a purple paper clip is [Choose]

$\frac{1}{4}$

$\frac{3}{4}$

$\frac{7}{25}$

$\frac{18}{25}$

and the probability of selecting a paper clip that is not purple is [Choose].

$\frac{1}{4}$

$\frac{3}{4}$

$\frac{7}{25}$

$\frac{18}{25}$

STAAR Released Item

7.6(H) 2019 item 16
[Application of Probability]

The table shows the number of bottles of different kinds of juice sold at a cafeteria on Monday.

Juice Sold

Kind of Juice	Number of Bottles Sold
Apple	11
Cranberry	7
Orange	18
Pineapple	4

If the cafeteria has 80 customers on Tuesday, which prediction for Tuesday is NOT supported by the data in the table?

F The number of bottles of cranberry juice sold will be 6 more than the number of bottles of pineapple juice sold.

G The number of bottles of apple juice sold will be 6 times the number of bottles of cranberry juice sold.

H There will be a total of 50 bottles of orange and cranberry juice sold.

J The difference between the number of bottles of apple juice sold and the number of bottles of pineapple juice sold will be 14.

Multiselect

The table shows the number of bottles of different kinds of juice sold at a cafeteria on Monday.

Juice Sold

Kind of Juice	Number of Bottles Sold
Apple	11
Cranberry	7
Orange	18
Pineapple	4

If the cafeteria has 80 customers on Tuesday, which prediction for Tuesday is supported by the data in the table?

Select the **THREE** correct answers.

- ☐ The number of bottles of cranberry juice sold will be 6 more than the number of bottles of pineapple juice sold.
- ☐ The number of bottles of apple juice sold will be 6 times the number of bottles of cranberry juice sold.
- ☐ There will be a total of 50 bottles of orange and cranberry juice sold.
- ☐ The difference between the number of bottles of apple juice sold and the number of bottles of pineapple juice sold will be 14.

STAAR Released Item

7.6(I) 2018 item 25
[Determination of Probability]

A number cube with faces labeled from 1 to 6 was rolled 20 times. Each time the number cube was rolled, the number showing on the top face was recorded. The table shows the results.

Results

Number Showing on Top Face	Frequency
1	0
2	3
3	3
4	6
5	3
6	5

Based on these results, what is the experimental probability that the next time the number cube is rolled it will land with 5 or 6 showing on the top face?

A $\frac{2}{5}$

B $\frac{3}{20}$

C $\frac{1}{3}$

D $\frac{3}{5}$

Drag and Drop

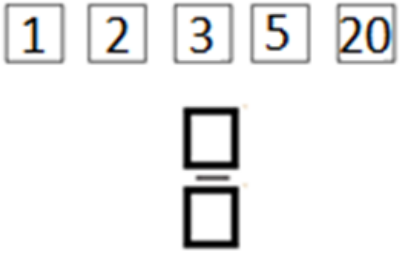
A number cube with faces labeled from 1 to 6 was rolled 20 times. Each time the number cube was rolled, the number showing on the top face was recorded. The table shows the results.

Results

Number Showing on Top Face	Frequency
1	0
2	3
3	3
4	6
5	3
6	5

Based on these results, what is the experimental probability that the next time the number cube is rolled it will land with 5 or 6 showing on the top face?

Move the correct answer to each box. Not all answers will be used.



Grade 7

Equations and Inequalities

STAAR Released Item

7.10(A) 2021 item 16
[Application of Equations/Inequalities]

The greatest weight a moving truck can carry is 1,600 pounds. The truck is loaded with a piano that weighs 400 pounds. Boxes that weigh 50 pounds each will also be loaded into the truck.

Which inequality represents all possible values of x, the number of these boxes that can be loaded into the moving truck?

F $50x + 400 \leq 1{,}600$

G $50x + 400 \geq 1{,}600$

H $400x + 50 \leq 1{,}600$

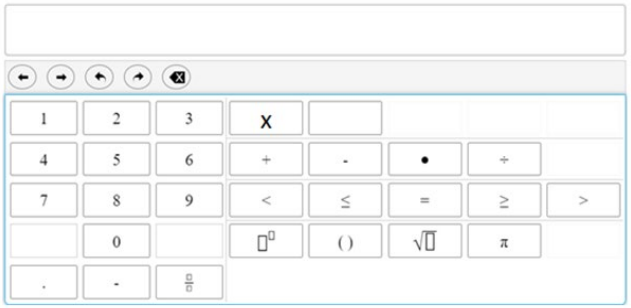
J $400x + 50 \geq 1{,}600$

Equation Editor/Text Entry

The greatest weight a moving truck can carry is 1,600 pounds. The truck is loaded with a piano that weighs 400 pounds. Boxes that weigh 5- pounds each will also be loaded into the truck.

Write an inequality that represents all possible values of x, the number of these boxes that can be loaded into the moving truck.

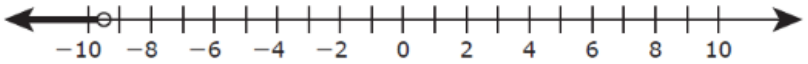
Enter your answer in the space provided.



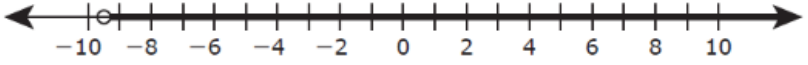
STAAR Released Item

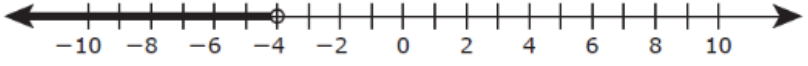
7.10(B) 2018 item 20
[Representation and Solutions of Equations/Inequalities]

Which number line best represents the solution to the inequality $3.3w - 9 > -22.2$?

F


G


H


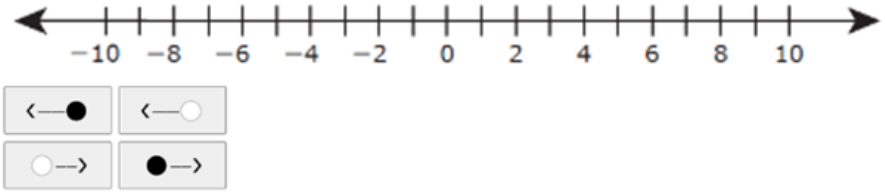
J


Number Line

Create a number line that best represents the solution to the inequality shown.

$$3.3w - 9 > -22.2$$

Select a ray. Move the point on the ray to the correct place on the number line.



STAAR Released Item

7.10(C) 2018 item 33
[Application of Equations/Inequalities]

Which situation can be represented by this inequality?

$$120 \leq 12k + 29$$

A Felicia has 12 buttons in her collection. She will collect 29 new buttons every year. Felicia collects buttons for k years. For what values of k will Felicia have at least 120 buttons?

B Felicia has 29 buttons in her collection. She will collect 12 new buttons every year. Felicia collects buttons for k years. For what values of k will Felicia have at least 120 buttons?

C Felicia has 29 buttons in her collection. She will collect 12 new buttons every year. Felicia collects buttons for k years. For what values of k will Felicia have at most 120 buttons?

D Felicia has 12 buttons in her collection. She will collect 29 new buttons every year. Felicia collects buttons for k years. For what values of k will Felicia have at most 120 buttons?

Inline Choice

Choose the correct answer from each drop-down menu to complete the situation that can be represented by the inequality $120 \leq 12k + 29$.

Felicia has [Choose...] buttons in her collection.
- 12
- 29
- 120

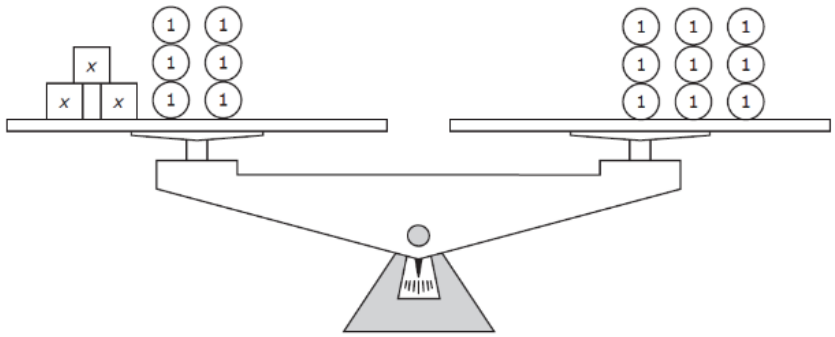
She will collect [Choose...] new buttons every year.
- 12
- 29
- 120

Felicia collects buttons for k years.
For what values of k will Felicia have [Choose...] 120 buttons?
- at least
- at most

STAAR Released Item

7.11(A) 2018 item 28
[Representation and Solutions of Equations/Inequalities]

The model represents an equation.



What is the solution for this equation?

F $x = 3$

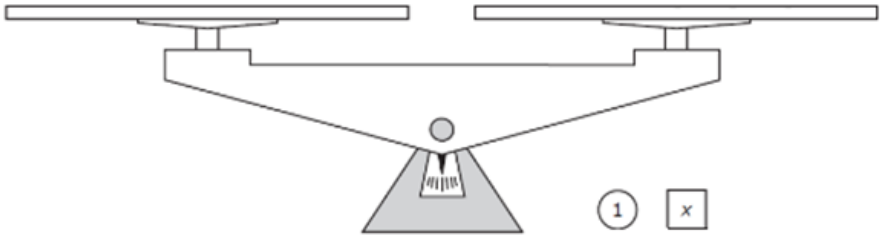
G $x = 15$

H $x = 5$

J $x = 1$

Drag and Drop

Model the equation $3x + 6 = 9$ to determine the solution.



Move the circles and boxes to model the equation.

Answers choices may be used more than once.

STAAR Released Item

7.11(B) 2019 item 34
[Representation and Solutions of Equations/Inequalities]

Which values from the set $\{-6, -4, -3, -1, 0, 2\}$ satisfy this inequality?

$$-\frac{1}{2}x + 3 \geq 5$$

F −4, −3, −1, 0, and 2 only

G −1, 0, and 2 only

H −6, −4, −3, and −1 only

J −6 and −4 only

Multiselect

Which values from the set $\{-6, -4, -3, -1, 0, 2\}$ satisfy this inequality?

$$-\frac{1}{2}x + 3 \geq 5$$

Select **TWO** values from the set.

- ☐ −6
- ☐ −4
- ☐ −3
- ☐ −1
- ☐ 0
- ☐ 2

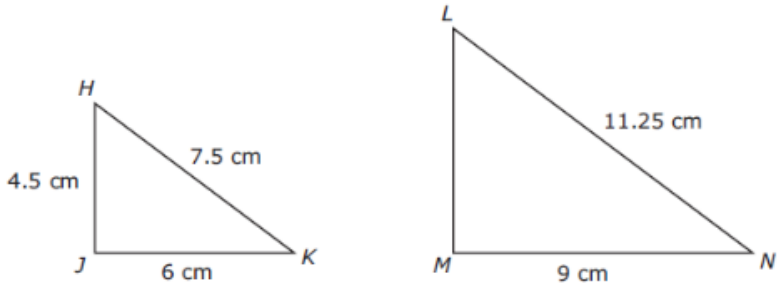
Grade 7

Geometry and Measurement

STAAR Released Item

7.5(A) 2021 item 11
[Similarity]

Triangle *HJK* is similar to triangle *LMN*.



Which proportion can be used to calculate the length of $\overline{LM}$ in centimeters?

A $\frac{7.5}{11.25} = \frac{LM}{4.5}$

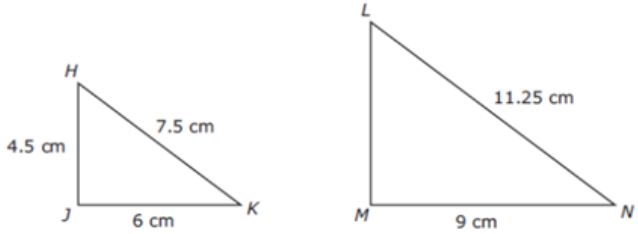
B $\frac{6}{7.5} = \frac{LM}{9}$

C $\frac{11.25}{LM} = \frac{4.5}{7.5}$

D $\frac{9}{LM} = \frac{6}{4.5}$

Multiselect

Triangle *HJK* is similar to triangle *LMN*.



Which proportions can be used to calculate the length of LM in centimeters?

Select **TWO** correct answers.

☐ $\frac{7.5}{11.25} = \frac{LM}{4.5}$

☐ $\frac{6}{7.5} = \frac{LM}{9}$

☐ $\frac{11.25}{LM} = \frac{4.5}{7.5}$

☐ $\frac{9}{LM} = \frac{6}{4.5}$

☐ $\frac{4.5}{LM} = \frac{6}{9}$

STAAR Released Item

7.5(A) 2017 item 39
[Similarity]

Mr. Ortiz used similar triangles to make a design. Which statement about the triangles in the design must be true?

A They are the same size and shape.

B They are the same size but different shapes.

C They have corresponding angles that are congruent.

D They have corresponding sides that are congruent.

Inline Choice

Choose the correct answer from the drop-down menu to complete the statement about the triangles in the design.

Mr. Ortiz used similar triangles to make a design.

They are the same [Choose... / size / shape] and have corresponding [Choose... / sides / angles] that are congruent.

STAAR Released Item

7.5(B) 2022 item 39
[Circles]

The circumference of a circle is C inches. The diameter of the circle is 19 inches.

Which expression best represents the value of π?

A $\frac{C}{19}$

B $\frac{19}{C}$

C $\frac{C}{9.5}$

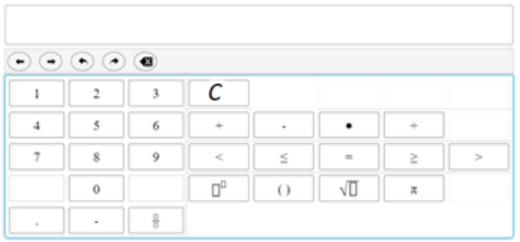
D $\frac{9.5}{C}$

Equation Editor/Text Entry

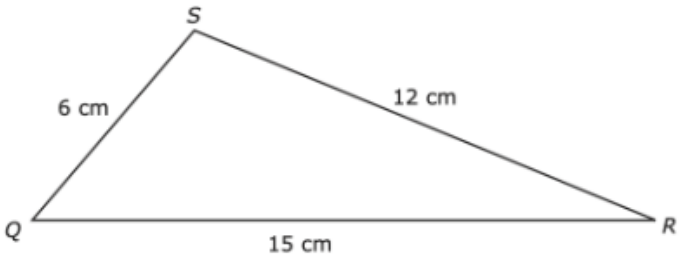
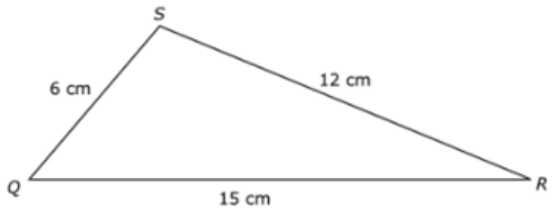
The circumference of a circle is C centimeters. The diameter of the circle is 13 centimeters.

Write an expression that best represents the value of π.

Enter your answer in the space provided.



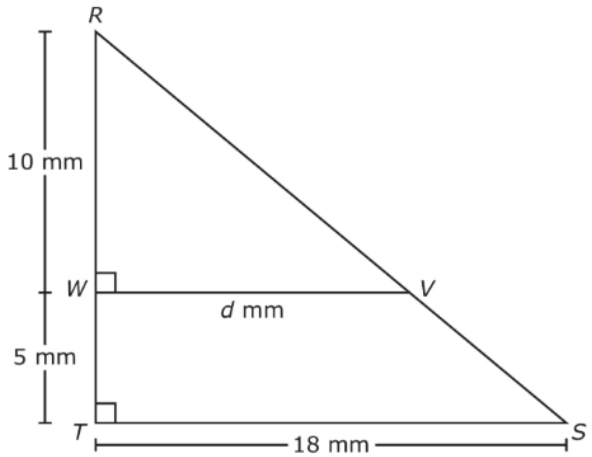
STAAR Released Item	Inline Choice
7.5(B) 2015 item 14 [Circles] Which of these best describes π? **A** The square root of the area of a circle **B** The ratio of the radius of a circle to its diameter **C** The radius of a circle times 3.14 **D** The ratio of the circumference of a circle to its diameter	Choose the correct answer from the drop-down menu to complete the description of π. The ratio of the [Choose...] of a circle to its diameter radius circumference

STAAR Released Item	Multiselect
7.5(C) 2022 item 5 [Similarity] Triangle *QRS* and its dimensions are shown.  Which measurements in centimeters represent the dimensions of a triangle that is similar to triangle *QRS*? **A** 8 cm, 14 cm, 17 cm **B** 10 cm, 20 cm, 25 cm **C** 4 cm, 10 cm, 13 cm **D** 12 cm, 24 cm, 36 cm	Triangle *QRS* and its dimensions are shown.  Select **TWO** triangles with the given measurements in centimeters that are similar to triangle *QRS*. ☐ 8 cm, 14 cm, 17 cm ☐ 10 cm, 20 cm, 25 cm ☐ 4 cm, 10 cm, 13 cm ☐ 12 cm, 24 cm, 30 cm

STAAR Released Item

7.5(C) 2019 item 33
[Similarity]

Triangle *RST* is similar to triangle *RVW*.



What is the value of *d* in millimeters?

A 27 mm

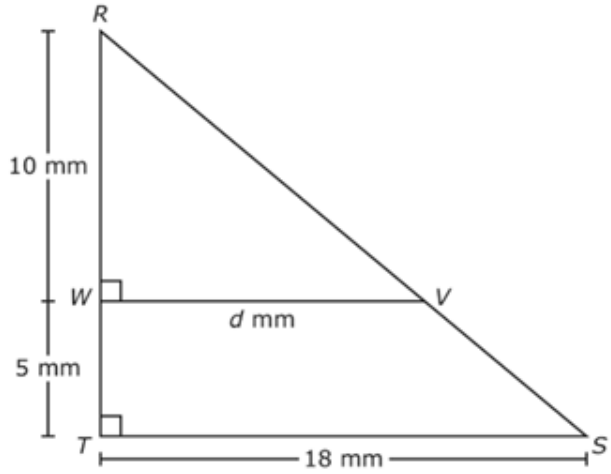
B 12 mm

C 9 mm

D 13 mm

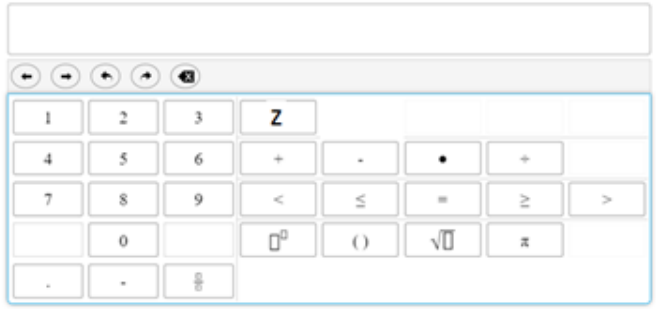
Equation Editor/Text Entry

Triangle *RST* is similar to triangle *RVW*.



What is the value of *d* in millimeters?

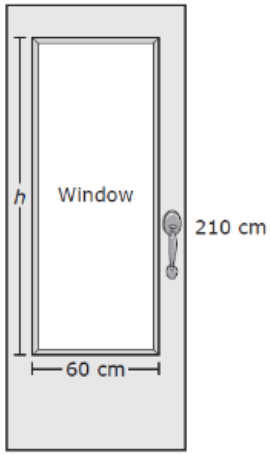
Enter your answer in the space provided.



STAAR Released Item

7.5(C) 2018 item 16
[Similarity]

The diagram shows a door that has a window in it. The front faces of the door and the window are similar rectangles that have the dimensions shown.



What is *h*, the height of the window in centimeters?

F 66 cm

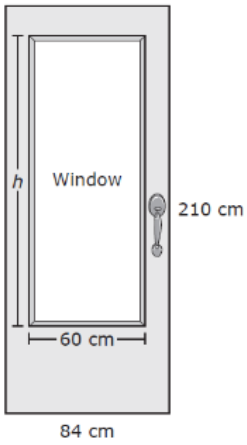
G 186 cm

H 150 cm

J Not here

Equation Editor/Text Entry

The diagram shows a door that has a window in it. The front faces of the door and the window are similar rectangles that have the dimensions shown.



What is *h*, the height of the window in centimeters?

Enter your answer in the space provided.

STAAR Released Item

7.5(C) 2018 item 32
[Similarity]

An architect built a scale model of a sports stadium using a scale in which 2 inches represents 30 feet. The height of the sports stadium is 180 feet.

What is the height of the scale model in inches?

F 3 in.

G 105 in.

H 12 in.

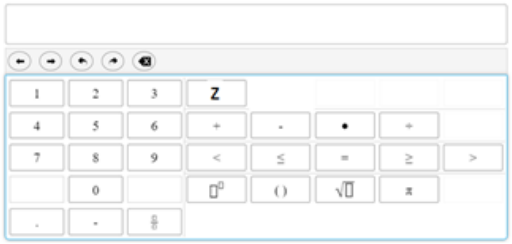
J 60 in.

Equation Editor/Text Entry

An architect built a scale model of a sports stadium using a scale in which 2 inches represents 30 feet. The height of the sports stadium is 180 feet.

What is the height of the scale model in inches?

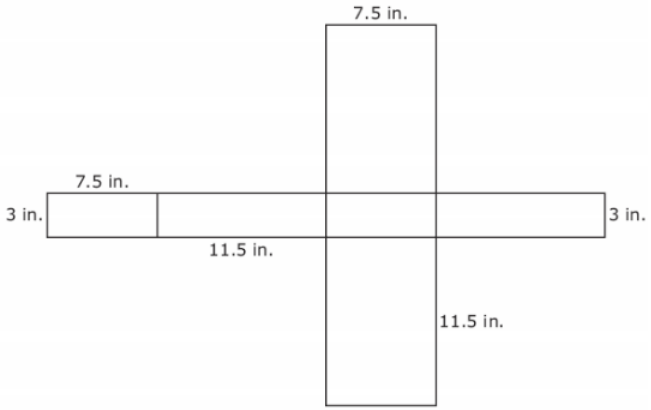
Enter your answer in the space provided.



STAAR Released Item

7.9(D) 2017 item 29
[Area]

The net of a rectangular prism and its dimensions are shown in the diagram.



What is the total surface area of the rectangular prism in square inches?

A 143.25 in.^{2}

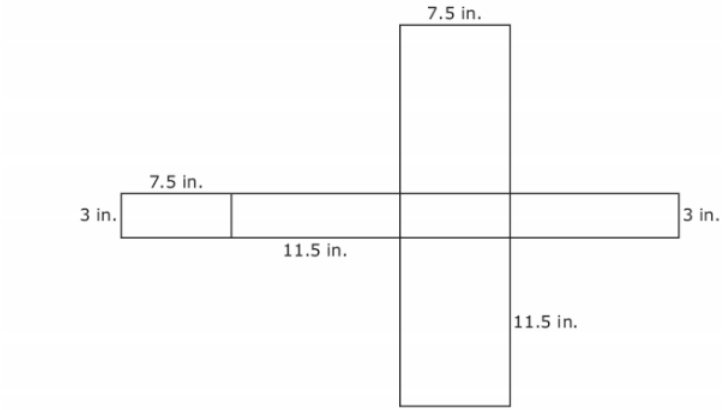
B 241.5 in.^{2}

C 258.75 in.^{2}

D 286.5 in.^{2}

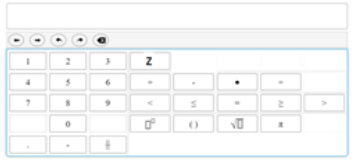
Equation Editor/Text Entry

The net of a rectangular prism and its dimensions are shown in the diagram.



What is the total surface area of the rectangular prism in square inches?

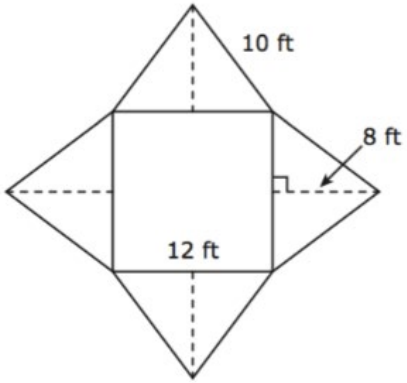
Enter your answer in the space provided.



STAAR Released Item	Equation Editor/Text Entry

7.9(D) 2016 item 6
[Area]

The net of a square pyramid and its dimensions are shown in the diagram.



What is the total surface area of the pyramid in square feet?

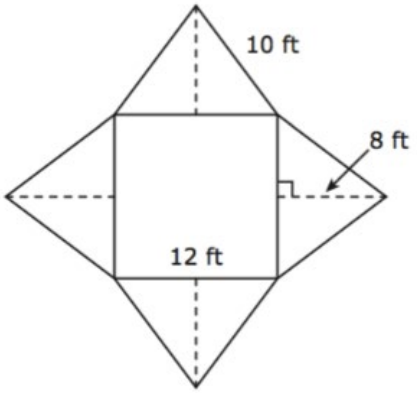
F 336 ft^2

G 960 ft^2

H 204 ft^2

J 624 ft^2

The net of a square pyramid and its dimensions are shown in the diagram.



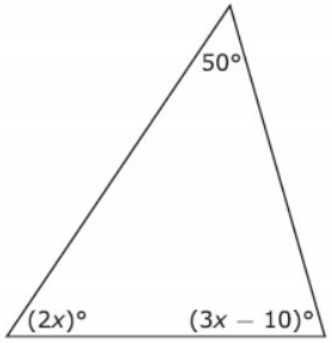
What is the total surface area of the pyramid in square feet?

Enter your answer in the space provided.

STAAR Released Item

7.11(C) 2017 item 24
[Angle Relationships]

The angle measures of a triangle are shown in the diagram.



What is the value of x?

F 25

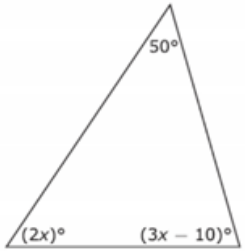
G 20

H 10

J 28

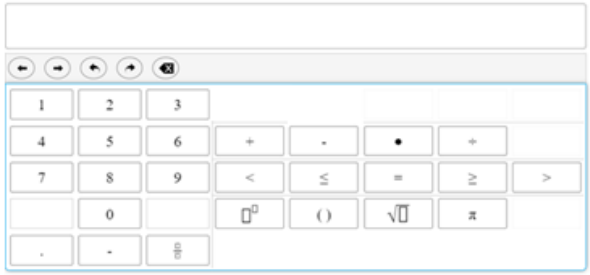
Equation Editor/Text Entry

The angle measures of a triangle are shown in the diagram.



What is the value of x?

Enter your answer in the space provided.



STAAR Released Item

7.11(C) 2016 item 19
[Angle Relationships]

An isosceles triangle has base angles that each measure 42°. Which equation can be used to find z, the measure of the third angle of this isosceles triangle in degrees?

A $84 + 2z = 180$

B $84 + z = 180$

C $42 + 2z = 180$

D $42 + z = 180$

Equation Editor/Text Entry

An isosceles triangle has base angles that each measure 42°. Write an equation that can be used to find z, the measure of the third angles of this isosceles triangle in degrees.

Enter your answer in the space provided.