STAAR Grade 8 Math Answer Key

Item Position	Item Type	TEKS Alignment	Maximum Number of Points	Correct Answers(s)	Reporting Category	Readiness or Supporting
1	Multiple Choice	8.1.2.A	1	B	1	Supporting
2	Multiple Choice	8.3.10.A	1	D	3	Supporting
3	Multiselect	8.2.5.G	2	C, E See Appendix 1.1	2	Readiness
4	Multiple Choice	8.3.6.C	1	D	3	Supporting
5	Multiple Choice	8.2.4.A	1	A	2	Supporting
6	Multiple Choice	8.3.7.B	1	D	3	Readiness
7	Multiple Choice	8.2.5.F	1	B	2	Supporting
8	Drag and Drop	8.3.10.C	2	$(x - 4, y + 3)$ See Appendix 1.2	3	Readiness
9	Multiple Choice	8.1.2.B	1	B	1	Supporting
10	Multiple Choice	8.2.8.C	1	A	2	Readiness
11	Multiple Choice	8.3.3.B	1	C	3	Supporting
12	Multiple Choice	8.4.5.D	1	A	4	Readiness
13	Multiple Choice	8.2.9.A	1	D	2	Supporting
14	Multiple Choice	8.3.7.A	1	C	3	Readiness
15	Drag and Drop	8.4.12.G	2	$625, $750 See Appendix 1.3	4	Supporting
16	Multiple Choice	8.2.4.B	1	B	2	Readiness
17	Multiple Choice	8.4.12.D	1	A	4	Readiness
18	Hotspot	8.1.2.D	2	$\sqrt{34}, \frac{19}{3}, 2\sqrt{11}$ See Appendix 1.4	1	Readiness
19	Multiple Choice	8.3.3.C	1	B	3	Readiness
20	Multiple Choice	8.2.5.I	1	D	2	Readiness
21	Multiple Choice	8.3.10.C	1	B	3	Readiness
22	Multiple Select	8.2.5.B	2	A, C See Appendix 1.5	2	Supporting
23	Multiple Choice	8.3.7.C	1	D	3	Readiness

24	Equation Editor	8.2.4.C	1	$\frac{1}{4}, (0, -2)$ See Appendix 1.6	2	Readiness
25	Multiple Choice	8.3.7.B	1	A	3	Readiness
26	Multiple Choice	8.2.4.B	1	C	2	Readiness
27	Multiple Choice	8.3.7.A	1	A	3	Readiness
28	Multiple Choice	8.4.5.D	1	C	4	Readiness
29	Drag and Drop	8.2.5.I	2	$y = \frac{3}{2}x + 6$ See Appendix 1.7	2	Readiness
30	Multiple Choice	8.1.2.D	1	A	1	Readiness
31	Multiple Choice	8.3.6.A	1	D	3	Supporting
32	Multiple Choice	8.2.4.C	1	B	2	Readiness
33	Drag and Drop	8.3.3.C	2	Option 2, Option 1 See Appendix 1.8	3	Readiness
34	Multiple Choice	8.2.5.G	1	D	2	Readiness
35	Multiple Choice	8.3.10.D	1	A	3	Supporting
36	Multiple Choice	8.2.8.C	1	D	2	Readiness
37	Drag and Drop	8.4.12.D	2	$250.00, $506.25 See Appendix 1.9	4	Readiness
38	Multiple Choice	8.3.3.A	1	C	3	Supporting
39	Multiple Choice	8.2.5.A	1	A	2	Supporting
40	Multiple Choice	8.3.8.D	1	C	3	Supporting

STAAR Grade 8 Math
Appendix

1.1

The table shows y as a function of x.

x	y
-4	-5
-2	-3
6	5
8	7

Which ordered pairs can also belong to the function?

Select **TWO** correct answers.

- [ ] $(-4, 3)$
- [ ] $(-2, 3)$
- [x] $(4, 3)$
- [ ] $(6, 8)$
- [x] $(9, 8)$

1.2

Rectangle $MNPQ$ is translated 4 units left and 3 units up. Write a rule that describes this transformation.

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

$x+3$ $y-3$ $-4x$ $3y$ $x+4$ $x-4$ $y+3$ $y-4$

$(x,y) \rightarrow ($ $x-4$, $y+3$ $)$

1.3

Desmond wants to attend a college that costs \$15,000 for the first year. Desmond's family has saved \$6,000, and he has applied for a \$1,500 scholarship. To have the full amount needed to pay for the year's tuition, his family will set aside a fixed amount of money each month for the next 12 months.

How much should Desmond's family save each month for the next 12 months to have enough money to pay for his first year of college?

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

\$500 \$625 \$750 \$1,125 \$1,250

If Desmond wins the scholarship, his family will need to save a minimum of \$625 per month.

If Desmond does not win the scholarship, his family will need to save a minimum of \$750 per month.

1.4

Which values of x make the inequality true?

$$x > \frac{28}{5}$$

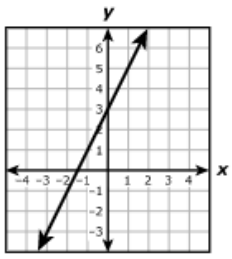
Select **THREE** correct answers.

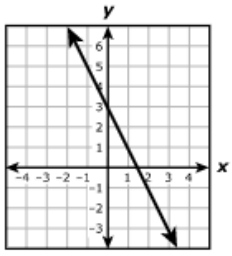
$\sqrt{34}$	-8	$\frac{19}{3}$
4.7	$2\sqrt{11}$	5.28

1.5

The value of y is 3 more than twice the opposite of x. Which of these represent this relationship?

Select **TWO** correct answers.

- [x] $y = -2x + 3$
- [ ] 

- [x] 

- [ ]

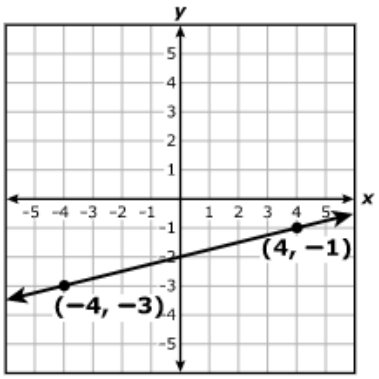
x	y
15	−6
−1	2
3	0

- [ ]

x	y
−8	−13
−4	−5
0	3

1.6

The graph of a linear function is shown on the coordinate grid.



What are the slope and the *y*-intercept of the function?

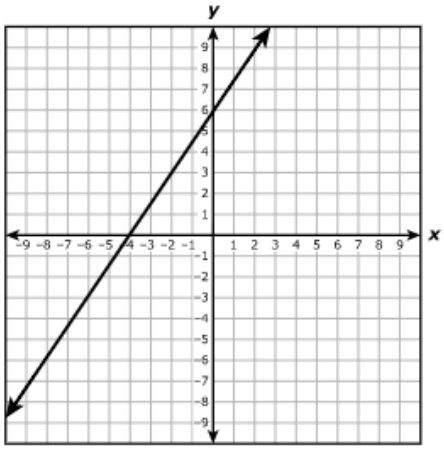
Enter numbers in the boxes provided.

$slope$: $\frac{1}{4}$

$y-intercept$: $\left(0 \ , \ -2 \right)$

1.7

The graph of a linear function is shown on the grid.



Create an equation that represents the relationship shown on the graph.

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

-4	$-\frac{3}{2}$	$-\frac{2}{3}$	$\frac{2}{3}$	$\frac{3}{2}$	6

$y = \boxed{\frac{3}{2}}\,x + \boxed{6}$

1.8

The table describes two dilations with the center of dilation at the origin. Which rule describes each dilation?

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

$(x, y) \rightarrow (2x, 2y)$	$(x, y) \rightarrow \left(\frac{1}{2}x, \frac{1}{2}y\right)$	$(x, y) \rightarrow (x + 2, y + 2)$	$(x, y) \rightarrow \left(x - \frac{1}{2}, y - \frac{1}{2}\right)$

Description of Shape Dilated on a Coordinate Plane	Rule of Dilation
A triangle is dilated by a scale factor of $\frac{1}{2}$.	$(x, y) \rightarrow \left(\frac{1}{2}x, \frac{1}{2}y\right)$
A square is dilated by a scale factor of 2.	$(x, y) \rightarrow (2x, 2y)$

1.9

A business owner opens a new investment account with a $10,000.00 deposit:

- The investment account earns 2.5% interest, compounded annually.
- The business owner does not plan to make any deposits or withdrawals.

How much interest will the investment account earn at the end of the first and second years?

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

$250.00 $500.00 $506.25 $562.50 $2,500.00 $5,000.00 $5,625.00

The account will earn [$250.00] in interest at the end of the first year.

At the end of the second year, the account will have earned a total of [$506.25] in interest.