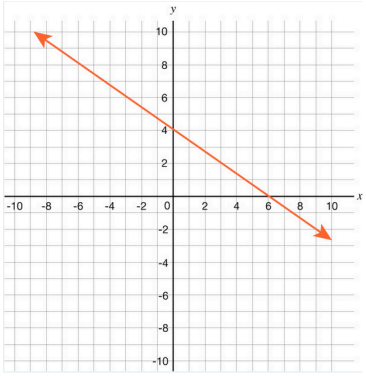
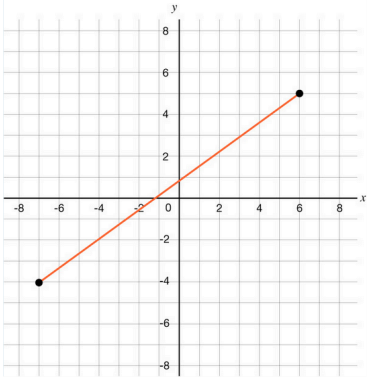
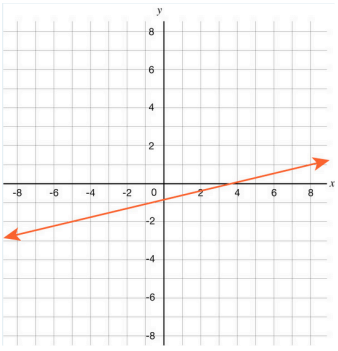
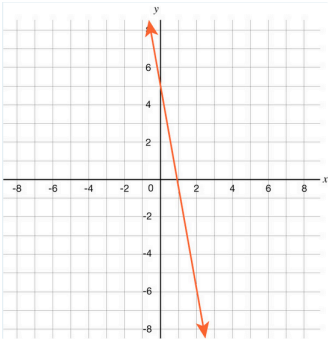
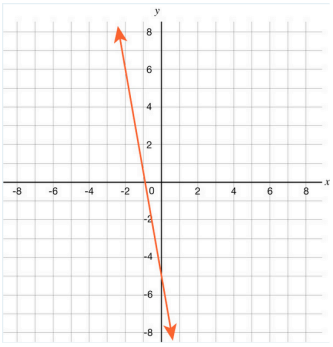
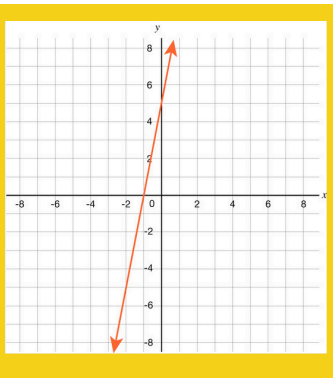
Unit 4 STAAR Review

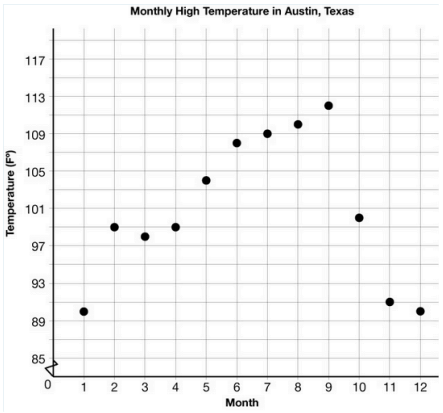
	Question	TEKS	Exam/ Question#	Unit
1	The graph of a linear function is shown on the grid.  Which function is best represented by this graph? **A** $g(x) = 6x + 4$ **B** $g(x) = 4x - \frac{2}{3}$ **C** $g(x) = -\frac{3}{2} + 6$ **D** $g(x) = -\frac{2}{3} + 4$ [correct answer]	A.2(C)	2021/ Question#2	4

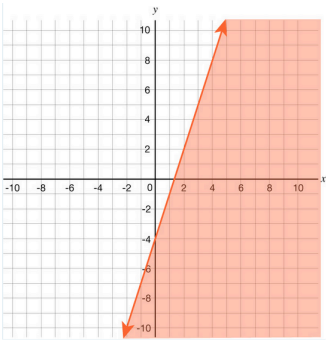
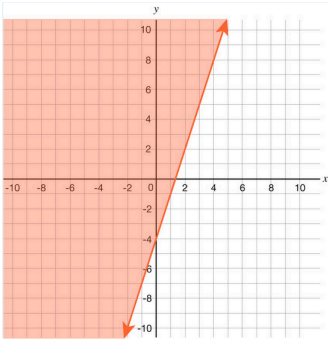
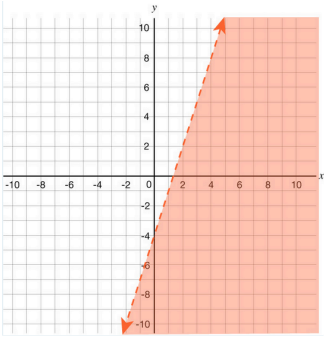
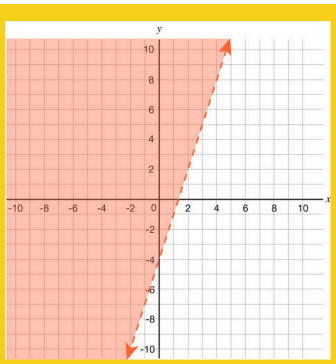
	Question	TEKS	Exam/ Question#	Unit
2	A part of linear function g is graphed on the grid.  Which inequalities best describe the domain and range of the part shown? **A** Domain: $-4 < x < 5$ Range: $-7 < g(x) < 6$ **B** Domain: $-7 < x < 6$ Range: $-4 < g(x) < 5$ **C** Domain: $-4 \leq x \leq 5$ Range: $-7 \leq g(x) \leq 6$ **D** Domain: $-7 \leq x \leq 6$ [correct answer] Range: $-4 \leq g(x) \leq 5$	A.2(A)	2021/ Question#22	4

3	Linear function *t* has an x-intercept of -1 and a y-intercept of 5. Which graph best represents *t*? **A**  **B**  **C**  **D**  [correct answer]	A.3(C)	2021/ Question#41	4

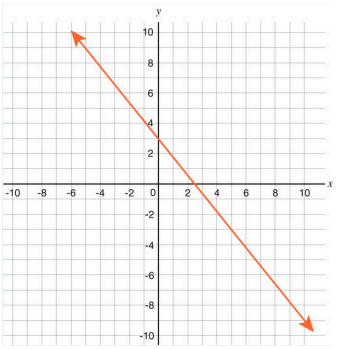
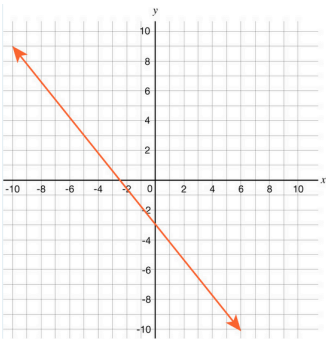
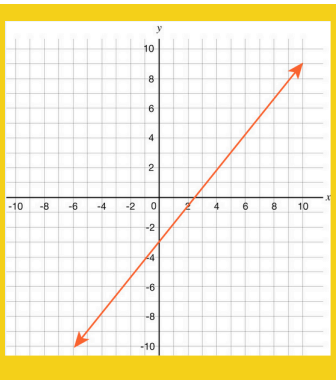
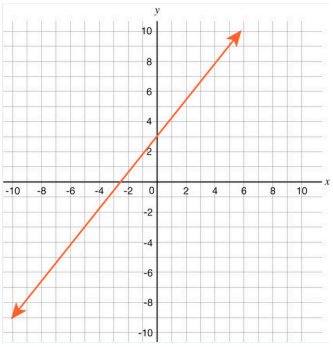
<table>
<tr><th></th><th>Question</th><th>TEKS</th><th>Exam/ Question#</th><th>Unit</th></tr>
<tr><td>4</td><td>A contractor’s total earnings from a job include a fixed amount plus an amount based on the number of hours worked. The values in the table represent the linear relationship between the number of hours worked and the contractor’s total earnings in dollars.
<table><tr><th>Number of Hours Worked</th><th>Total Earnings</th></tr><tr><td>0</td><td>$20.00</td></tr><tr><td>5</td><td>$63.75</td></tr><tr><td>15</td><td>$151.25</td></tr><tr><td>25</td><td>$238.75</td></tr><tr><td>35</td><td>$326.25</td></tr><tr><td>40</td><td>$370.00</td></tr></table>What is the rate of change of the contractor’s total earnings in dollars with respect to the number of hours worked?

A $8.75 per hour worked [correct answer]
B $9.25 per hour worked
C $10.00 per hour worked
D $20.00 per hour worked</td><td>A.3(B)</td><td>2021/ Question#36</td><td>4</td></tr>
</table>

	Question	TEKS	Exam/ Question#	Unit
5	In a sequence of numbers, a_3 = 0, a_4 = 6, a_5 = 12, a_6 = 18, and a_7 = 24. Based on this information, which equation can be used to find the nth term in the sequence, a_n? **A** $a_n = 6n - 18$ **B** $a_n = -18n + 6$ **C** $a_n = 6n - 18$ [correct answer] **D** $a_n = 18n - 6$	A.12(D)	2018/ Question#9	4
6	The scatterplot shows the monthly high temperatures for Austin, Texas, in degrees Fahrenheit over a 12-month period.  Which function best models the data from Month 1 to Month 9? **A** $y = -1.6x + 111$ **B** $y = 3.5x + 85$ **C** $y = 2.5x + 90$ [correct answer] **D** $y = -3.3x + 130$	A.4(C)	2016/ Question#26	3

7	Which graph best represents the solution set of $y > 3x - 4$? **A**  **B**  **C**  **D**  [correct answer]	A.3(D)	2019/ Question#17	2

	Question	TEKS	Exam/ Question#	Unit
8	What is the value of *x* in the solution to this system of equations? $\begin{cases} 3x - 5y = 22 \\ y = -5x + 32 \end{cases}$ **A** -6.5 **B** 0.5 **C** 6.5 [correct answer] **D** -0.5	A.5(C)	2019/ Question#37	2

9	Which graph best represents $-5y = -6x + 15$? **A**  **B**  **C**  [correct answer] **D** 	A.3(C)	2019/ Question#7	1

	Question	TEKS	Exam/ Question#	Unit
10	What is the equation in slope-intercept form of the line that passes through the points $(-4, 2)$ and $(12, 6)$? **A** $y = 0.25x + 3$ [correct answer] **B** $y = 0.25x - 45$ **C** $y = 4x + 18$ **D** $y = 4x - 42$	A.2(B)	2019/ Question#6	1