STAAR® Alternate 2

State of Texas Assessments of Academic Readiness — Alternate 2

Algebra I

2015 Released Test Questions

TEST ADMINISTRATOR INSTRUCTIONS

Question 1

Grade	EOC	**Subject**	Algebra I	**Question**	1
Reporting Category 3		Writing and Solving Linear Functions, Equations, and Inequalities: The student will demonstrate an understanding of how to write and solve linear functions, equations, and inequalities.			
Knowledge and Skill Statement A.5		The student applies the mathematical process standards to solve, with and without technology, linear equations and evaluate the reasonableness of their solutions.			
Essence Statement		Solves linear equations, inequalities, and systems.			
Prerequisite Skill (Old Curriculum)		identify patterns in related addition and subtraction sentences (fact families for sums to 18) such as 2 + 3 = 5, 3 + 2 = 5, 5 – 2 = 3, and 5 – 3 = 2 (1)			

Question 2

Grade	EOC	**Subject**	Algebra I	**Question**	2
Reporting Category 3		Writing and Solving Linear Functions, Equations, and Inequalities: The student will demonstrate an understanding of how to write and solve linear functions, equations, and inequalities.			
Knowledge and Skill Statement A.5		The student applies the mathematical process standards to solve, with and without technology, linear equations and evaluate the reasonableness of their solutions.			
Essence Statement		Solves linear equations, inequalities, and systems.			
Prerequisite Skill (Old Curriculum)		identify patterns in related multiplication and division sentences (fact families) such as 2 × 3 = 6, 3 × 2 = 6, 6 ÷ 2 = 3, 6 ÷ 3 = 2 (3)			

Question 3

Grade	EOC	**Subject**	Algebra I	**Question**	3
Reporting Category 3		Writing and Solving Linear Functions, Equations, and Inequalities: The student will demonstrate an understanding of how to write and solve linear functions, equations, and inequalities.			
Knowledge and Skill Statement A.5		The student applies the mathematical process standards to solve, with and without technology, linear equations and evaluate the reasonableness of their solutions.			
Essence Statement		Solves linear equations, inequalities, and systems.			
Prerequisite Skill (Old Curriculum)		select from and use diagrams and equations such as $y = 5 + 3$ to represent meaningful problem situations (5)			

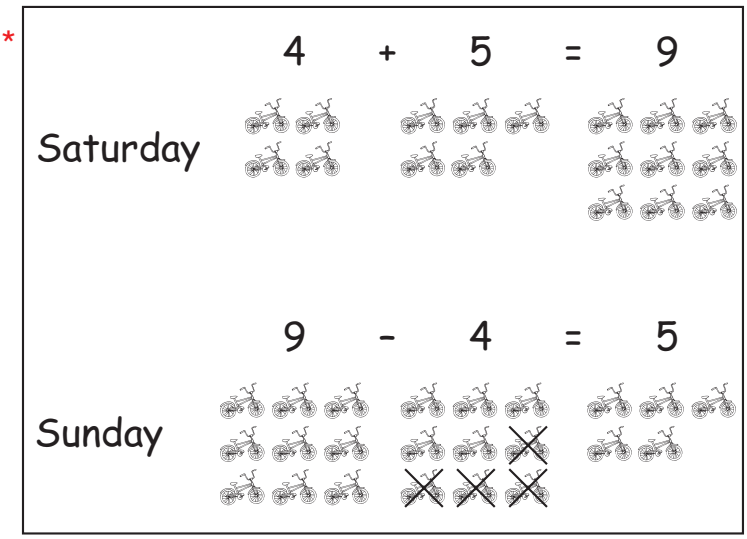
Question 4

Grade	EOC	**Subject**	Algebra I	**Question**	4
Reporting Category 3		Writing and Solving Linear Functions, Equations, and Inequalities: The student will demonstrate an understanding of how to write and solve linear functions, equations, and inequalities.			
Knowledge and Skill Statement A.5		The student applies the mathematical process standards to solve, with and without technology, linear equations and evaluate the reasonableness of their solutions.			
Essence Statement		Solves linear equations, inequalities, and systems.			
Prerequisite Skill (Old Curriculum)		formulate equations from problem situations described by linear relationships (6)			

Presentation Instructions for Question 1

- *Present* Stimulus 1.
- *Direct* the student to the first equation. *Communicate:* **On Saturday, a bike shop built four bikes in the morning and five bikes in the afternoon for a total of nine bikes.**
- *Direct* the student to the second equation. *Communicate:* **On Sunday, the bike shop had nine bikes to sell. Four bikes were sold. Five bikes were left.**
- *Communicate:* **Find the equations that show what happened on Saturday and Sunday at the bike shop.**

Stimulus 1



Scoring Instructions		
Student Action		**Test Administrator Action**
If the student finds the equations,	➡	mark **A** for question 1 and move to question 2.
If the student does not find the equations,	➡	• remove the stimulus; • wait at least five seconds; and • replicate the initial presentation instructions.
After the five-second wait time, if the student finds the equations,	➡	mark **B** for question 1 and move to question 2.
After the five-second wait time, if the student does not find the equations,	➡	mark **C** for question 1 and move to question 2.

Presentation Instructions for Question 2

- *Present* Stimulus 2a and 2b.
- *Direct* the student to Stimulus 2a. *Communicate:* **Seventy-seven newspapers were delivered to a school. A student delivered the newspapers to eleven classrooms. Each classroom received seven newspapers.**
- *Direct* the student to each answer choice in Stimulus 2b. *Communicate:* **At the end of the week, the eleven classrooms each recycled their seven newspapers. Seventy-seven newspapers were recycled.**
- *Communicate:* **Find the equation that shows the total number of newspapers that were recycled.**

Stimulus 2a

77 newspapers ÷ 11 classrooms = 7 newspapers per classroom

Stimulus 2b

*

11 classrooms × 7 newspapers per classroom = 77 newspapers

11 classrooms × 6 newspapers per classroom = 66 newspapers

Scoring Instructions

Student Action		Test Administrator Action
If the student finds "11 × 7 = 77,"	➡	mark **A** for question 2 and move to question 3.
If the student does not find "11 × 7 = 77,"	➡	• model the desired student action by finding "11 × 7 = 77" and *communicate* **"This is the equation that shows the total number of newspapers that were recycled and has the numbers 11, 7, and 77"**; and • replicate the initial presentation instructions.
After teacher modeling, if the student finds "11 × 7 = 77,"	➡	mark **B** for question 2 and move to question 3.
After teacher modeling, if the student does not find "11 × 7 = 77,"	➡	mark **C** for question 2 and move to question 3.

Presentation Instructions for Question 3

- *Present* Stimulus 3a and 3b.
- *Direct* the student to the first equation. *Communicate:* **One day, a student stacked 75 boxes. He stacked 25 boxes per hour.**
- *Direct* the student to the second equation. *Communicate:* **The next day, the student stacked 60 boxes. He stacked 20 boxes per hour.**
- *Direct* the student to the empty boxes. *Communicate:* **The student worked the same number of hours each day. The number of hours he worked each day is missing.**
- *Direct* the student to each answer choice in Stimulus 3b. *Communicate* each answer choice.
- *Communicate:* **Find the number of hours the student worked each day.**

Stimulus 3a

75 boxes ÷ ☐ = 25 boxes per hour

60 boxes ÷ ☐ = 20 boxes per hour

Stimulus 3b

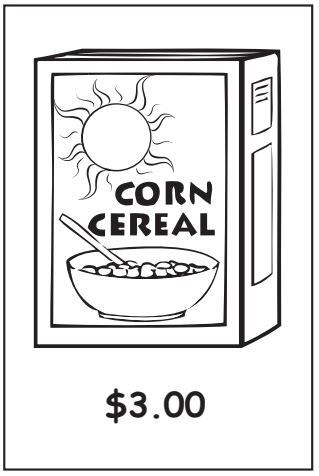
30 hours | 5 hours | * 3 hours

Scoring Instructions		
Student Action		**Test Administrator Action**
If the student finds "3 hours,"	➡	mark **A** for question 3 and move to question 4.
If the student does not find "3 hours,"	➡	provide ***one*** of these allowable teacher assists to the student: • Have the student try each answer choice in the equation. **OR** • Allow the student to use a calculator. Replicate the initial presentation instructions.
After the selected teacher assistance, if the student finds "3 hours,"	➡	mark **B** for question 3 and move to question 4.
After the selected teacher assistance, if the student does not find "3 hours,"	➡	mark **C** for question 3 and move to question 4.

Presentation Instructions for Question 4

- *Present* Stimulus 4a and 4b.
- *Direct* the student to Stimulus 4a. *Communicate:* **A student buys 5 boxes of cereal. Each box costs $3.00. She has a coupon for $2.00 off the total amount.**
- *Direct* the student to each answer choice in Stimulus 4b. *Communicate* each answer choice.
- *Communicate:* **Find the pair of equations that can be used to find how much money the student spends.**

Stimulus 4a



Stimulus 4b

$5 \times \$3.00 = \square$

$\square + \$2.00 = \$17.00$

* $5 \times \$3.00 = \square$

$\square - \$2.00 = \$13.00$

$5 - \$3.00 = \square$

$\square \times \$2.00 = \$4.00$

Scoring Instructions		
Student Action		**Test Administrator Action**
If the student finds "5 × $3.00 = ☐ and ☐ – $2.00 = $13.00,"	➡	mark **A** for question 4.
If the student does not find "5 × $3.00 = ☐ and ☐ – $2.00 = $13.00,"	➡	replicate the initial presentation instructions.
After the teacher repeats the instructions, if the student finds "5 × $3.00 = ☐ and ☐ – $2.00 = $13.00,"	➡	mark **B** for question 4.
After the teacher repeats the instructions, if the student does not find "5 × $3.00 = ☐ and ☐ – $2.00 = $13.00,"	➡	mark **C** for question 4.