SBAC Math 7 ANSWERS Practice A

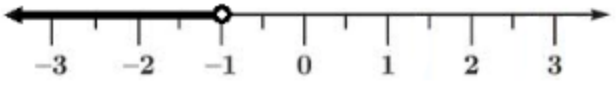
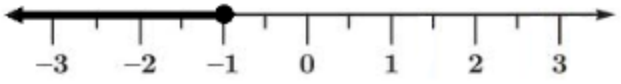
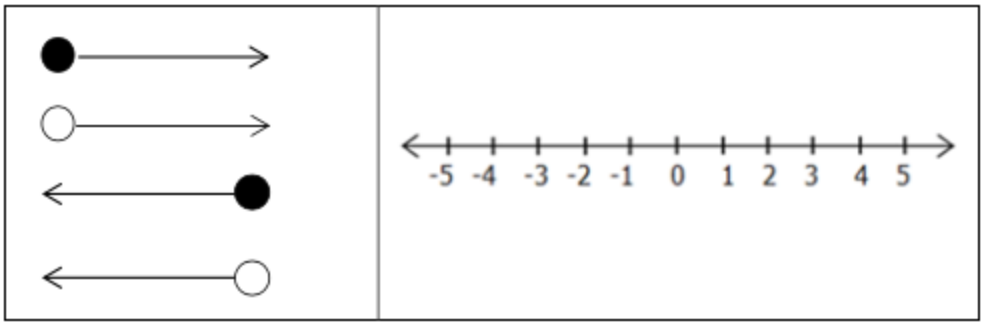
Name _____ Period _____ Date _____

Expressions & Equations

1	**Example Stem:** Select **all** expressions equivalent to $2.3 \bullet (1\frac{1}{8} + 0.125) - 9$. A. $2.3 \bullet (1.25) - 9$ B. $9 - 2.3 \bullet (1.125 + \frac{1}{8})$ C. $-9 + 2.3 \bullet (1.125 + \frac{1}{8})$ D. $2.3 \bullet (9 - 1.25)$	A and C
2	**Example Stem 1:** Enter the value of $2\frac{1}{4} \bullet (4 + 12)$.	36
3	**Example Stem 2:** What is the mean of -15, -12, 8, and 9?	-2.5
4	**Example Stem:** Javier's fuel tank holds $12\frac{3}{4}$ gallons of gasoline when completely full. He had some gas in the tank and added 10.3 gallons of gasoline to fill it completely. How many gallons of gasoline were in the tank before Javier added some?	2.45
5	**Example Stem 1:** A coach buys a uniform and a basketball for each of the 15 players on the team. Each basketball costs $9.40. The coach spends a total of $420 for uniforms and basketballs. Enter an equation that models the situation with *u*, the cost of one uniform.	15u+15 •9.4 = 420

SBAC Math 7 ANSWERS Practice A

Name _____ Period _____ Date _____

6	**Example Stem 2:** A coach buys a uniform and a basketball for each of the 15 players on the team. Each basketball costs $9. The coach spends a total of $420 for uniforms and basketballs. Enter the cost, in dollars, of 1 uniform.	19
7	**Example Stem:** Linda has $26. She wants to buy a ski pass for $80. She can earn $6 per hour to babysit. Enter an inequality that represents the number of hours (*h*) Linda could babysit to earn at least enough money to buy the ski pass.	$6h + 26 \geq 80$
8	**Example Stem:** Which number line shows the solution to the inequality $-3x - 5 < -2$? A.  B.  C.  D.  	A
9	**Example Stem:** Drag the correct arrow to the number line to represent the solution of the inequality $3x + 7 > 13$.  	graph

Test Writers Guidelines Zip File
Expressions and Equations B

EE: Practice A

SBAC Math 7 ANSWERS Practice A

Name _____ Period _____ Date _____

10 **Claim 2**	**Example Item 2A.1.f (Grade 7):** Primary Target 2A (Content Domain EE), Secondary Target 1C (CCSS 7.RP.A), Tertiary Target 2D Justin's car can travel 77.5 miles using 3.1 gallons of gas. At this rate, how far, in miles, can Justin travel using 8.2 gallons of gas? Enter the distance in the response box.	205
11 **Claim 2**	Grades 6-8, Claim 2 **Example Item 2A.3b (Grade 7):** Primary Target 2A (Content Domain EE), Secondary Target 1D (CCSS 7.EE.B), Tertiary Target 2D The marching band has 85 members. There are 15 more girls than boys in the band. How many boys are in the marching band? Enter your answer in the response box.	35
12 **Claim 2**	**Example Item 2C.2a (Grade 7):** Primary Target 2C (Content Domain EE), Secondary Target 1D (CCSS 7.EE.B), Tertiary Target 2D (Source: Adapted from *Illustrative Mathematics*, Grade 7.EE) The students in Mr. Sanchez's class are converting distances measured in miles (m) to kilometers (km). Abby and Renato use the following methods to convert miles to kilometers. • Abby takes the number of miles, doubles it, and then subtracts 20% of the result. • Renato first divides the number of miles by 5, then multiplies the result by 8. Which equation correctly shows why both their methods produce the same result? A. $2m - 0.20 = \frac{m}{5} \cdot 8$ B. $2m - 0.20(2m) = \frac{m}{5} \cdot 8$ C. $2m - 2.20m = \frac{m}{5} + 8\left(\frac{m}{5}\right)$ D. $0.20(2m) - 2m = \frac{m}{5} + 8\left(\frac{m}{5}\right)$	B
13 **Claim 2**	Grades 6-8, Claim 2 **Example Item 2C.2b (Grade 7):** Primary Target 2C (Content Domain EE), Secondary Target 1C (CCSS 7.EE.B), Tertiary Target 2D A mail-order company sells jars of spices. • An empty jar has a mass of 200 grams. • A full jar contains 110 grams of a spice. • The company sells *n* jars filled with spices. Select the best interpretation of the expression (200 +110)*n*. A. The cost to ship 1 full jar B. The cost to ship *n* full jars C. The mass of 1 full jar D. The mass of *n* full jars	D

SBAC Math 7 ANSWERS Practice A

Name _____ Period _____ Date _____

14 **Claim 3**	**Example Item 3B.3b (Grade 7)** Primary Target 3B (Content Domain EE), Secondary Target 1D (7.EE.B), Tertiary Target 3C In February, the price of a gallon of gasoline increased by 23% from the price in January. In March, the price decreased by 11% from the price in February. In March, gas cost $2.63 per gallon. How much did a gallon of gasoline cost in January, in dollars? Round your answer to the nearest cent. Enter your answer in the response box. Which equation shown can be solved to find x, the cost of gas in January? A. $(0.11)(0.23)x = 2.63$ B. $(1.11)(1.23)x = 2.63$ C. $(0.89)(1.23)x = 2.63$ D. $(1.11)(0.77)x = 2.63$	2.40 C
15 **Claim 4**	**Example Item 4F.1a (Grade 7)** Primary Target 4E (Content Domain EE), Secondary Target 1F (CCSS 6.EE.B), Tertiary Target 4F, Quaternary Target 4D Megan has $2500. She spends money on the following: • $800 on rent • $400 on food • $200 on utility services • $250 on loan payments • $x on other expenses Let y represent the amount of money in dollars Megan has left. Write an equation that represents the relationship between the amount of money Megan spends on other expenses and the amount of money Megan has left.	y=850-x