

**912A31 Form A**

- 1 Solve  $7(x - 2) = 7x + 14$ .  
**A.** no solution    **B.** 0    **C.** 2    **D.** all real numbers

- 2 Leah scored  $p$  points in the first half of the basketball game. In the second half, she scored 3 more than  $\frac{1}{2}$  the number of points she scored in the first half of the game. Altogether, she scored 21 points in the game. The following equation represents this situation where  $p$  represents the number of points Leah scored in the first half.

$$p + \left( \frac{1}{2}p + 3 \right) = 21$$

How many points did Leah score in the first half?

- F.** 6    **G.** 9    **H.** 12    **I.** 18

- 3 Gloria earns 1.5 times her normal hourly pay for each hour that she works over 40 hours in a week. Her normal pay is  $p$  dollars per hour. Last week Gloria worked 47 hours and earned \$489.85. The following equation represents this situation where  $p$  is Gloria's normal hourly pay in dollars per hour.

$$40p + 7(1.5p) = 489.85$$

What is Gloria's normal hourly pay?

- A.** \$5.90    **B.** \$6.95    **C.** \$8.70    **D.** \$9.70

- 4 Solve  $3(a - 4) + 2(a + 1) = 10 - 5a$ .  
**F.** 0    **G.** 2    **H.** all real numbers    **I.** no solution

- 5 When solving the equation, what property was used to go from Step 2 to Step 3?

Step 1:  $-(2x + 3) = x - 18$

Step 2:  $-2x - 3 = x - 18$

Step 3:  $-3 = 3x - 18$

- A.** Addition Property of Equality    **B.** Subtraction Property of Equality    **C.** Multiplication Property of Equality    **D.** Division Property of Equality

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**Answer Section**

1	ANS: A	PTS: 1	STA: MA.912.A.3.1
2	ANS: H	PTS: 1	STA: MA.912.A.3.1
3	ANS: D	PTS: 1	STA: MA.912.A.3.1
4	ANS: G	PTS: 1	STA: MA.912.A.3.2
5	ANS: A	PTS: 1	STA: MA.912.A.3.2