**Additional Problems for 7th Grade Benchmark 1**

AP1

(7.7A) Which equation best represents the relationship between *x* and *y* below?

|  |  |
| --- | --- |
| ***x*** | ***y*** |
| 0 | -7 |
| 3 | -5 |
| 6 | -3 |
| 9 | -1 |
| 12 | 1 |

A

B

C

D

Answer: D

AP2

(7.7A) A pool has 2 feet of water in it, and water is being added to it at a rate of 3 inches per hour. Which equation represents the relationship between *y*, the height of the water in inches, and *x*, the number of hours water is being added?

A

B

C

D

Answer: B

AP3

(7.10A) Monique needs $6.00 in quarters for a coin-operated washing machine. She already has five quarters. Which equation can be used to find *x*, the number of additional quarters Monique needs in order to have enough money to wash her clothes?

A

B

C

D

Answer: A

AP4

(7.11A) A 50-gallon tank is draining at a rate of 2.5 gallons per minute. Model an equation to represent the time, *t*, in minutes it will take the tank to only have two gallons left in it. Solve for *t*.

Answer: C

AP5

(7.11A) Tickets for a play cost $5.00 each and40 tickets have already been sold. Model an inequality to represent the number of additional tickets, *x*, that need to be sold in order for the play revenue to be at least $1200. Solve the inequality.

A

B

C

D

Answer: B

AP6

(7.2A) Which subset of the rational numbers would best describe the type of numbers in the following set:

1. Whole Numbers
2. Integers
3. Natural Numbers
4. Negative Numbers

Answer: B

AP7

(7.2A) Which of the following statements is true?

1. Whole Numbers is a subset of the Integers.
2. Integers is a subset of the Whole Numbers.
3. The set of Whole Numbers contains all of the Integers.
4. All Integers are contained in the set of negative Whole Numbers.

Answer: A

AP8

(7.4A) Which of the following equations represents the distance, *d*, a car travels if it is moving at 55 miles per hour? Let *t* represent the number of hours the car has been traveling.



Answer: C

AP9

(7.4C) Which of the following equations has a constant of proportionality of 7?

A.

B.

C.

D.

Answer: D

AP10

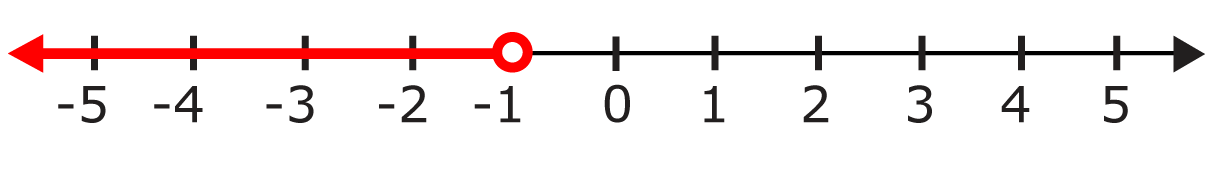
(7.4C) What would be the constant of proportionality for the following table?

|  |  |
| --- | --- |
| ***x*** | ***y*** |
| 0 | 0 |
| 1 | 4.5 |
| 2 | 9 |
| 3 | 13.5 |
| 4 | 18 |

1. 0
2. 4.5
3. 9
4. 18

Answer: B

AP11

(7.10B) The following number line represents the solution for which inequality? 

A

B

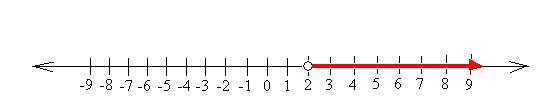
C

D

Answer: D

AP12

(7.10B) The following number line represents the solution for which inequality?



A

B

C

D