### Lesson 6 Practice Problems

1. Which equation is equivalent to the equation $6x+9=12$?
	1. $x+9=6$
	2. $2x+3=4$
	3. $3x+9=6$
	4. $6x+12=9$
2. Select **all** the equations that have the same solution as the equation $3x−12=24$.
	1. $15x−60=120$
	2. $3x=12$
	3. $3x=36$
	4. $x−4=8$
	5. $12x−12=24$
3. Jada has a coin jar containing $n$ nickels and $d$ dimes worth a total of $3.65. The equation $0.05n+0.1d=3.65$ is one way to represent this situation.
* Which equation is equivalent to the equation $0.05n+0.1d=3.65$?
	1. $5n+d=365$
	2. $0.5n+d=365$
	3. $5n+10d=365$
	4. $0.05d+0.1n=365$
1. Select **all** the equations that have the same solution as $2x−5=15$.
	1. $2x=10$
	2. $2x=20$
	3. $2(x−5)=15$
	4. $2x−20=0$
	5. $4x−10=30$
	6. $15=5−2x$
2. The number of hours spent in an airplane on a single flight is recorded on a dot plot. The mean is 5 hours and the standard deviation is approximately 5.82 hours. The median is 4 hours and the IQR is 3 hours. The value 26 hours is an outlier that should not have been included in the data.
* 
* When the outlier is removed from the data set:
	1. What is the mean?
	2. What is the standard deviation?
	3. What is the median?
	4. What is the IQR?
* (From Unit 1, Lesson 14.)
1. A basketball coach purchases bananas for the players on his team. The table shows total price in dollars, $P$, of $n$ bananas.
* Which equation could represent the total price in dollars for $n$ bananas?

|  |  |
| --- | --- |
| * number of bananas
 | * total price in dollars
 |
| * 7
 | * 4.13
 |
| * 8
 | * 4.72
 |
| * 9
 | * 5.31
 |
| * 10
 | * 5.90
 |

* 1. $P=0.59n$
	2. $P=5.90−0.59n$
	3. $P=\frac{5.90}{n}$
	4. $P=n+0.59$
* (From Unit 2, Lesson 3.)
1. Kiran is collecting dimes and quarters in a jar. He has collected $10.00 so far and has $d$ dimes and $q$ quarters. The relationship between the numbers of dimes and quarters, and the amount of money in dollars is represented by the equation $0.1d+0.25q=10$.
* Select **all** the values $(d,q)$ that could be solutions to the equation.
	1. $(100,0)$
	2. $(20,50)$
	3. $(50,20)$
	4. $(0,100)$
	5. $(10,36)$
* (From Unit 2, Lesson 4.)
1. Here is a graph of the equation $3x−2y=12$.
* Select **all** coordinate pairs that represent a solution to the equation.
* 
	1. $(2,-3)$
	2. $(4,0)$
	3. $(5,-1)$
	4. $(0,-6)$
	5. $(2,3)$
* (From Unit 2, Lesson 5.)
1. Jada bought some sugar and strawberries to make strawberry jam. Sugar costs $1.80 per pound, and strawberries cost $2.50 per pound. Jada spent a total of $19.40.
* Which point on the coordinate plane could represent the pounds of sugar and strawberries that Jada used to make jam?
* 
	1. Point A
	2. Point B
	3. Point C
	4. Point D
* (From Unit 2, Lesson 5.)



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