6.EE.6: Worksheet

1. What types of numbers can the variable in the equation $2a + 3 = 7$ take?

2. We multiply 5 by a number and then add 11. What expression would this look like?

3. In a class of twelve, some students got sick, so only three could come to class. What equation or expression could you write for this situation?

4. In the expression $7x + 3$, the variable x represents the number of cats we want to adopt. What types of numbers could x be?

5. Regina wanted an increase in her weekly allowance from $5 to $10, but her parents did her one better. Instead, Regina rolls a fair, six-sided die every week, and her allowance for that week will be the number she rolls multiplied by 2. What expression could we write for Regina's weekly allowance? Define your variable and list what types of numbers the variable can be.

6. As part of her magic show, Maggie the Mediocre tells a volunteer to pick a whole number between 1 and 25, and she'll guess it using ESP. Being mediocre, Maggie always guesses a number that's 2 greater than the volunteer's actual pick. What expression could we write for the number that Maggie the Mediocre guesses? Define your variable and list what types of numbers the variable can be.

7. Andrew has seventeen of the same exact coin in his pocket and he wants to figure out how much money he has. What expression could we write for the amount of money that Andrew has in dollars? Define your variable and list what types of numbers the variable can be.

8. Sammy destroys five zombies in the morning and some more in the afternoon. At the end of the day Sammy has destroyed a total of 11 zombies. Write an equation that represents this situation. Define your variable and list what types of numbers the variable can be.

9. Hannah buys a book that costs a certain amount. For tax, the bookstore adds 1 dollar to the price. Hannah has a coupon that gives her 50% off after tax, so they reduce the price accordingly. If Hannah has to pay a total of $6 for the book after tax and after her discount, write an equation that represents this situation. Define your variable and list what types of numbers the variable can be.

10. Harry works as a mannequin arranger for Mannequins "R" Us. He earns 9 dollars per hour and made a total of $270 last month. Write an equation that represents this situation. Define your variable and list what types of numbers the variable can be.