- (●) $w = 1.05$
- ( ) $w = 11$
- ( ) $w = 0$
- ( ) $w = 1.2$

✓ **Correct**
$1.05 > 1$ is true since 1.05 is to the right of 1 on the real number line, and $1.05 < 1.2$ is also true, since 1.05 is to the left of 1.2 on the real number line.

5. Suppose that x and y are two real numbers which satisfy $x+ 3 = 4y + 1$. **Which of the following statements are false?** 1 / 1 point

- ( ) $2x + 6 = 8y + 2$
- ( ) $x = 4y - 2$
- ( ) $x + 2 = 4y$
- (●) $x = 4y$

✓ **Correct**
The equation $x = 4y$ cannot be derived from the given equation.

6. Which of the following real numbers is in the open interval $(2, 3)$? 1 / 1 point

- ( ) 1
- (●) 2.1
- ( ) 3
- ( ) 2

✓ **Correct**
Recall that the open interval $(2, 3)$ consists of all real numbers x which satisfy $2 < x < 3$. Since $2.1 > 2$ and $2.1 < 3$, the number 2.1 is in this open interval.

7. Which of the following real numbers are in the open ray $(3.1, \infty)$? 1 / 1 point

- ( ) 0
- ( ) 3.1
- (●) 4.75
- ( ) -5

✓ **Correct**
Recall that $(3.1, \infty) = \{x \in \mathbb{R} | \ x > 3.1\}$. Since $4.75 > 3.1$ is true, $4.75 \in (3.1, \infty)$.

8. Which of the following values for x solves the equation $-3x + 2 = -4$ 1 / 1 point

- (●) $x = 2$
- ( ) All values of x such that $x \leq 2$
- ( ) $x = -2$
- ( ) x=\begin {align}\frac {2} {3}\end {align}

✓ **Correct**
First we subtract 2 from both sides of the given equation, to obtain $-3x = -6$. Finally, to isolate x we divide both sides of the equation by -3 to obtain $x = 2$.