N: Key D: _____ P: 1 2 3 4 5 6

Topic 1 // 2.1 (Inequalities) // Practice C ***Mission Hills Math 2013***

→ *Use separate piece of paper*

A. Decide whether the number is a solution of the inequality. (Yes or No)

1) $3x + 5 \leq 20$, 4

$-5 \quad -5$

$\frac{3x}{3} \leq \frac{15}{3}$

$x \leq 5$ **Yes**

2) $6 - 2y > 10$, -2

$-6 \quad -6$

$\frac{-2y}{-2} > \frac{4}{-2}$

$y < -2$ **No**

3) $-4 \leq w + 5$, -2

$-5 \quad -5$

$-9 \leq w$

$w \geq -9$

Yes

B. Solve and graph the following inequalities

4) $x - 3 < -6$

$+3 \quad +3$

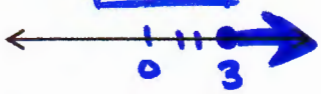
$x < -3$

5) $2y + 1 \geq 7$

$-1 \quad -1$

$\frac{2y}{2} \geq \frac{6}{2}$

$y \geq 3$

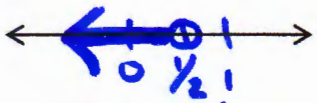


6) $-6a - 5 > -8$

$+5 \quad +5$

$\frac{-6a}{-6} > \frac{-3}{-6}$

$a < \frac{1}{2}$



7) $5x - 3 \leq 2x + 6$

$-2x \quad +3 \quad -2x \quad +3$

$\frac{3x}{3} \leq \frac{9}{3}$

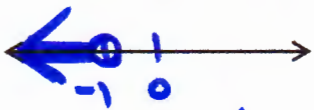
$x \leq 3$

8) $9 - 3k > 12$

$-9 \quad -9$

$\frac{-3k}{-3} > \frac{3}{-3}$

$k < -1$

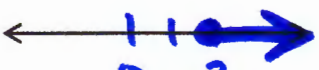


9) $-2x \geq -8x + 12$

$+8x \quad +8x$

$\frac{6x}{6} \geq \frac{12}{6}$

$x \geq 2$



10) $-\frac{1}{2}x - 5 < -2$

$+5 \quad +5$

$\left(\frac{-2}{1}\right)\frac{-1}{2}x < 3\left(\frac{-2}{1}\right)$

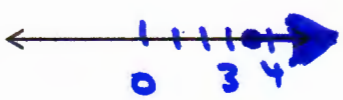
$x > -6$

11) $2x - 7 \geq 0$

$+7 \quad +7$

$\frac{2x}{2} \geq \frac{7}{2}$

$x \geq 7/2$



$7/2 = 3\frac{1}{2}$

12) $9a + 4 \leq 12a - 11$

$-9a + 11 \quad -9a + 11$

$\frac{15}{3} \leq \frac{3a}{3}$

$5 \leq a$ or $a \geq 5$