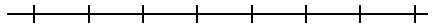


組 番 氏名 _____

I. 次の不等式を解きなさい。
また、解の範囲を数直線上に図示しなさい。

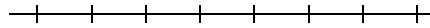
①【宮城1991】
 $x - 2 > 3x - 6$

答. _____



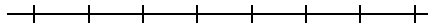
③【埼玉1991】
 $x + 9 > 4x + 3$

答. _____



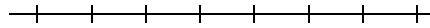
②【福島1991】
 $x + 3 > 2x + 5$

答. _____



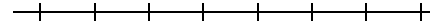
④【東京1991】
 $6x - 5 > 8x + 13$

答. _____



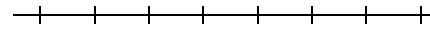
⑤【北海道1991】
 $2(x + 3) \leq -x + 8$

答. _____



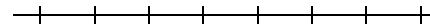
⑥【岩手1991】
 $5x + 7 > 2(x - 1)$

答. _____



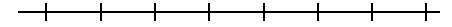
⑦【栃木1991】
 $3x < 12 - x$

答. _____



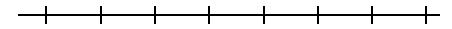
⑧【新潟1991】
 $x + 2 < 3(x - 1)$

答. _____



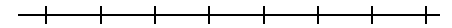
⑨【富山1991】
 $2x - 7 \leq 4x - 1$

答. _____



⑩【福井1991】
 $9 - x > 2x - 3$

答. _____

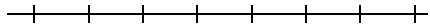


組 番 氏名 _____

II. 次の不等式を解きなさい。
また、解の範囲を数直線上に図示しなさい。

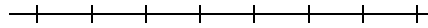
①【長野1991】
 $3x - 2 < 4x - 5$

答. _____



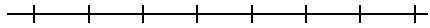
③【三重1991】
 $2x - 3 > 7x + 1$

答. _____



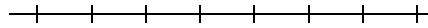
②【岐阜1991】
 $x - 5 < 4x + 16$

答. _____



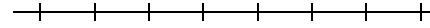
④【大阪1991】
 $2(3x - 1) > -4x + 3$

答. _____



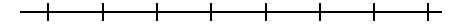
⑤【奈良1991】
 $2x - 15 \leq 4x - 7$

答. _____



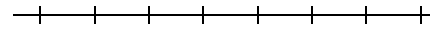
⑧【熊本1991】
 $7 > 3x - 5$

答. _____



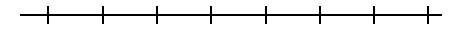
⑥【広島1991】
 $3(2x - 1) + 7 > 8x$

答. _____



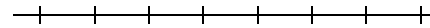
⑨【大分1991】
 $2x + 3 \geq 4x - 7$

答. _____



⑦【香川1991】
 $3(x - 2) \geq 2(2x + 1)$

答. _____



⑩【鹿児島1991】
 $x + 0.6 < 0.2x - 1$

答. _____



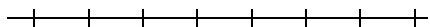
組 番 氏名 _____

Ⅲ. 次の不等式を解きなさい。
また、解の範囲を数直線上に図示しなさい。

①【佐賀1991】

$$\frac{1}{2}x > \frac{4}{5}x + 3$$

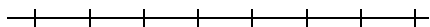
答. _____



②【新潟1991】

$$\frac{1}{3}x - 1 > 2x + 4$$

答. _____



③【岡山1991】

$$2x - 1 < \frac{2x + 5}{3}$$

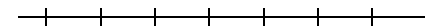
答. _____



⑤【愛知1991】

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

答. _____



④【京都1991】

$$\frac{4 - x}{2} > 7 + 2x$$

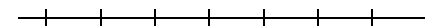
答. _____



⑥【岡山1992】

$$x - \frac{1}{4}(x - 2) > 1$$

答. _____



負の数をかけるとき、
負の数でわるときに
注意！！

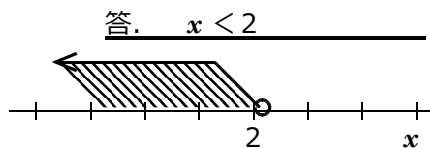


I. 次の不等式を解きなさい。

また、解の範囲を数直線上に図示しなさい。

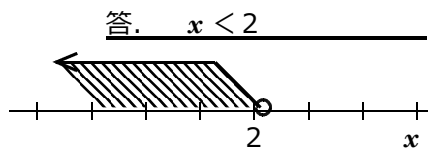
①【宮城1991】

$$\begin{aligned} x - 2 &> 3x - 6 \\ x - 3x &> -6 + 2 \\ -2x &> -4 \\ x &< \frac{-4}{-2} \\ x &< 2 \end{aligned}$$



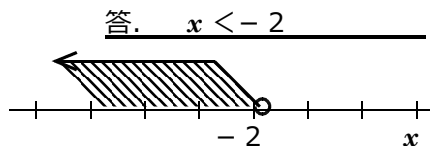
③【埼玉1991】

$$\begin{aligned} x + 9 &> 4x + 3 \\ x - 4x &> 3 - 9 \\ -3x &> -6 \\ x &< \frac{-6}{-3} \\ x &< 2 \end{aligned}$$



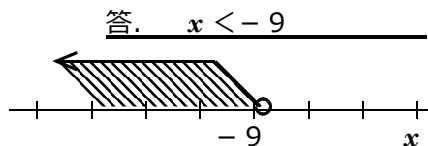
②【福島1991】

$$\begin{aligned} x + 3 &> 2x + 5 \\ x - 2x &> 5 - 3 \\ -x &> 2 \\ x &< \frac{2}{-1} \\ x &< -2 \end{aligned}$$



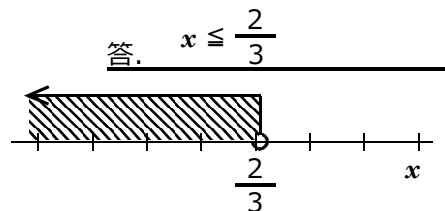
④【東京1991】

$$\begin{aligned} 6x - 5 &> 8x + 13 \\ 6x - 8x &> 13 + 5 \\ -2x &> 18 \\ x &< \frac{18}{-2} \\ x &< -9 \end{aligned}$$



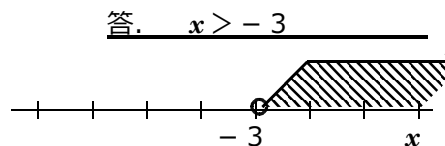
⑤【北海道1991】

$$\begin{aligned} 2(x + 3) &\leq -x + 8 \\ 2x + 6 &\leq -x + 8 \\ 2x + x &\leq 8 - 6 \\ 3x &\leq 2 \\ x &\leq \frac{2}{3} \end{aligned}$$



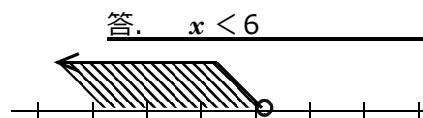
⑥【岩手1991】

$$\begin{aligned} 5x + 7 &> 2(x - 1) \\ 5x + 7 &> 2x - 2 \\ 5x - 2x &> -2 - 7 \\ 3x &> -9 \\ x &> \frac{-9}{3} \\ x &> -3 \end{aligned}$$



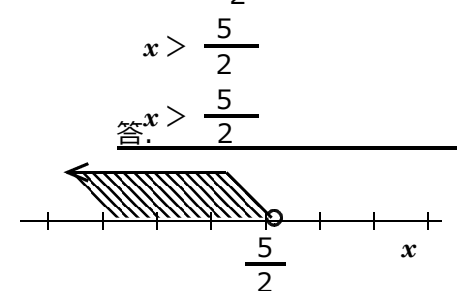
⑦【栃木1991】

$$\begin{aligned} 3x &< 12 - x \\ 3x - x &< 12 \\ 2x &< 12 \\ x &< \frac{12}{2} \\ x &< 6 \end{aligned}$$



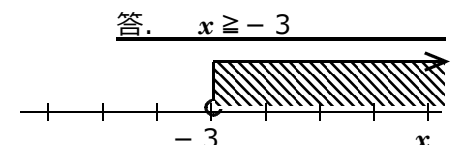
⑧【新潟1991】 6 x

$$\begin{aligned} x + 2 &< 3(x - 1) \\ x + 2 &< 3x - 3 \\ x - 3x &< -3 - 2 \\ -2x &< -5 \\ x &> \frac{-5}{-2} \end{aligned}$$



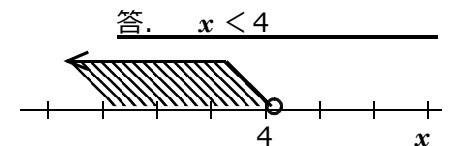
⑨【富山1991】

$$\begin{aligned} 2x - 7 &\leq 4x - 1 \\ 2x - 4x &\leq -1 + 7 \\ -2x &\leq 6 \\ x &\geq \frac{6}{-2} \\ x &\geq -3 \end{aligned}$$



⑩【福井1991】

$$\begin{aligned} 9 - x &> 2x - 3 \\ -x - 2x &> -3 - 9 \\ -3x &> -12 \\ x &< \frac{-12}{-3} \\ x &< 4 \end{aligned}$$



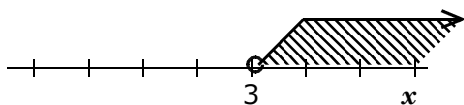
II. 次の不等式を解きなさい。

また、解の範囲を数直線上に図示しなさい。

①【長野1991】

$$\begin{aligned} 3x - 2 &< 4x - 5 \\ 3x - 4x &< -5 + 2 \\ -x &< -3 \\ x &> \frac{-3}{-1} \\ x &> 3 \end{aligned}$$

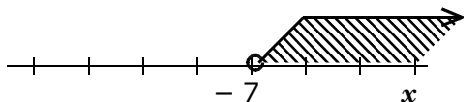
答. $x > 3$



②【岐阜1991】

$$\begin{aligned} x - 5 &< 4x + 16 \\ x - 4x &< 16 + 5 \\ -3x &< 21 \\ x &> \frac{21}{-3} \\ x &> -7 \end{aligned}$$

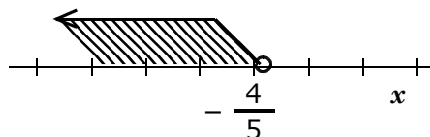
答. $x > -7$



③【三重1991】

$$\begin{aligned} 2x - 3 &> 7x + 1 \\ 2x - 7x &> 1 + 3 \\ -5x &> 4 \\ x &< \frac{4}{-5} \\ x &< -\frac{4}{5} \end{aligned}$$

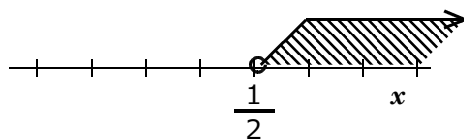
答. $x < -\frac{4}{5}$



④【大阪1991】

$$\begin{aligned} 2(3x - 1) &> -4x + 3 \\ 6x - 2 &> -4x + 3 \\ 6x + 4x &> 3 + 2 \\ 10x &> 5 \\ x &> \frac{5}{10} \\ x &> \frac{1}{2} \end{aligned}$$

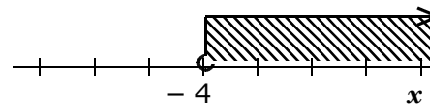
答. $x > \frac{1}{2}$



⑤【奈良1991】

$$\begin{aligned} 2x - 15 &\leq 4x - 7 \\ 2x - 4x &\leq -7 + 15 \\ -2x &\leq 8 \\ x &\geq \frac{8}{-2} \\ x &\geq -4 \end{aligned}$$

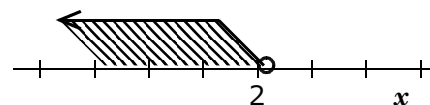
答. $x \geq -4$



⑥【広島1991】

$$\begin{aligned} 3(2x - 1) + 7 &> 8x \\ 6x - 3 + 7 &> 8x \\ 6x - 8x &> 3 - 7 \\ -2x &> -4 \\ x &< \frac{-4}{-2} \\ x &< 2 \end{aligned}$$

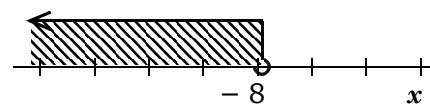
答. $x < 2$



⑦【香川1991】

$$\begin{aligned} 3(x - 2) &\geq 2(2x + 1) \\ 3x - 6 &\geq 4x + 2 \\ 3x - 4x &\geq 2 + 6 \\ -x &\geq 8 \\ x &\leq \frac{8}{-1} \\ x &\leq -8 \end{aligned}$$

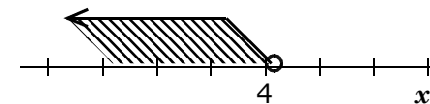
答. $x \leq -8$



⑧【熊本1991】

$$\begin{aligned} 7 &> 3x - 5 \\ -3x &> -5 - 7 \\ -3x &> -12 \\ x &< \frac{-12}{-3} \\ x &< 4 \end{aligned}$$

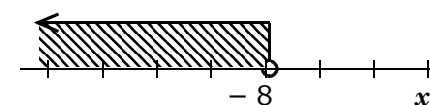
答. $x < 4$



⑨【大分1991】

$$\begin{aligned} 2x + 3 &\geq 4x - 7 \\ 2x - 4x &\geq -7 - 3 \\ -2x &\geq -10 \\ x &\leq \frac{-10}{-2} \\ x &\leq 5 \end{aligned}$$

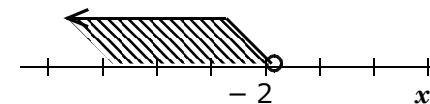
答. $x \leq -8$



⑩【鹿児島1991】

$$\begin{aligned} x + 0.6 &< 0.2x - 1 \\ \text{すべての項を10倍する} \\ x \times 10 + 0.6 \times 10 &< 0.2x \times 10 - 1 \times 10 \\ 10x + 6 &< 2x - 10 \\ 10x - 2x &< -10 - 6 \\ 8x &< -16 \\ x &< \frac{-16}{8} \\ x &< -2 \end{aligned}$$

答. $x < -2$



Ⅲ. 次の不等式を解きなさい。

また、解の範囲を数直線上に図示しなさい。

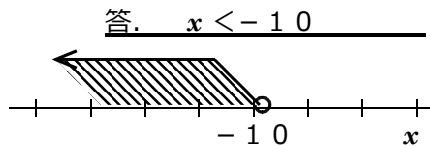
①【佐賀1991】

$$\frac{1}{2}x > \frac{4}{5}x + 3$$

すべての項に2と5の最小公倍数の10をかけて分母をはらう

$$\frac{1}{2}x \times 10 > \frac{4}{5}x \times 10 + 3 \times 10$$

$$\begin{aligned} 5x &> 8x + 30 \\ 5x - 8x &> 30 \\ -3x &> 30 \\ x &< -10 \end{aligned}$$



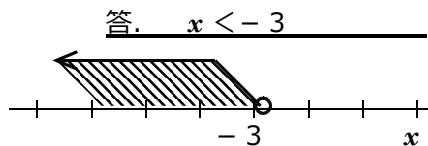
②【新潟1991】

$$\frac{1}{3}x - 1 > 2x + 4$$

すべての項に3をかけて、分母をはらう

$$\frac{1}{3}x \times 3 - 1 \times 3 > 2x \times 3 + 4 \times 3$$

$$\begin{aligned} x - 3 &> 6x + 12 \\ x - 6x &> 12 + 3 \\ -5x &> 15 \\ x &< \frac{15}{-5} \\ x &< -3 \end{aligned}$$



負の数をかけるとき、
負の数でわるときに
注意！！



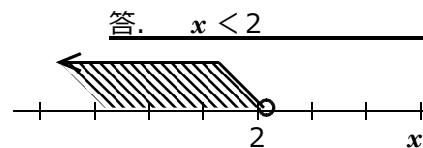
③【岡山1991】

$$2x - 1 < \frac{2x + 5}{3}$$

両辺に3をかけて分母をはらう

$$2x \times 3 - 1 \times 3 < \frac{2x + 5}{3} \times 3$$

$$\begin{aligned} 6x - 3 &< 2x + 5 \\ 6x - 2x &< 5 + 3 \\ 4x &< 8 \\ x &< \frac{8}{4} \\ x &< 2 \end{aligned}$$



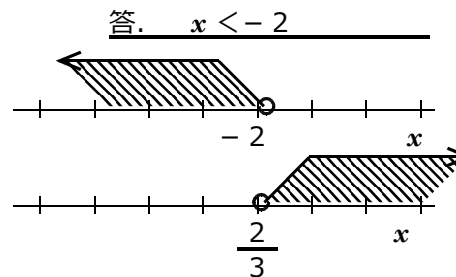
④【京都1991】

$$\frac{4-x}{2} > 7 + 2x$$

両辺に2をかけて分母をはらう

$$\frac{4-x}{2} \times 2 > 7 \times 2 + 2x \times 2$$

$$\begin{aligned} 4 - x &> 14 + 4x \\ -x - 4x &> 14 - 4 \\ -5x &> 10 \\ x &< \frac{10}{-5} \\ x &< -2 \end{aligned}$$



⑤【愛知1991】

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

まずかっこはずしをする

$$3 - 6x < \frac{1 - 3x}{2}$$

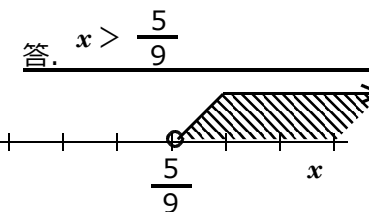
両辺に2をかけて分母をはらう

$$3 \times 2 - 6x \times 2 < \frac{1 - 3x}{2} \times 2$$

$$\begin{aligned} 6 - 12x &< 1 - 3x \\ -12x + 3x &< 1 - 6 \\ -9x &< -5 \end{aligned}$$

$$x > \frac{-5}{-9}$$

$$x > \frac{5}{9}$$



⑥【岡山1992】

$$x - \frac{1}{4}(x - 2) > 1$$

まずかっこはずしをする

$$x - \frac{1}{4}x + \frac{1}{2} > 1$$

すべての項に4と2の最小公倍数の4をかけて分母をはらう

$$x \times 4 - \frac{1}{4}x \times 4 + \frac{1}{2} \times 4 > 1 \times 4$$

$$\begin{aligned} 4x - x + 2 &> 4 \\ 4x - x &> 4 - 2 \\ 3x &> 2 \end{aligned}$$

$$x > \frac{2}{3}$$

