$$|3x + 2| > 5$$

i)
$$3x + 2 \ge 0$$

i)
$$3x + 2 \ge 0$$
, $3x \ge -2$

i)
$$3x+2\geq 0$$
 , $3x\geq -2, x\geq -\frac{2}{3}$

i)
$$3x + 2 \ge 0$$
 , $3x \ge -2$, $x \ge -\frac{2}{3}$ $(3x + 2)$ > 5

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$$3x + 2 \ge 0$$
, $3x \ge -2$, $x \ge -\frac{2}{3}$
 $(3x + 2) > 5$
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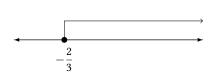


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$$3x + 2 \ge 0$$
, $3x \ge -2$, $x \ge -\frac{2}{3}$
 $(3x + 2) > 5$
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 $3x > 5 - 2$
 $3x > 3$

x > 1



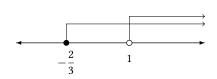
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 $3x > 3$
 $x > 1$



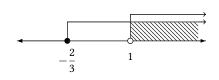
i)
$$3x + 2 \ge 0$$
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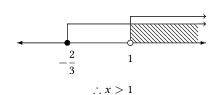
i)
$$3x + 2 \ge 0$$
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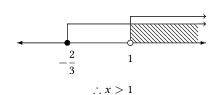
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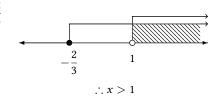
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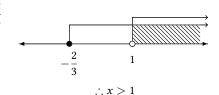


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$$3x + 2 \ge 0$$
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 $(3x + 2) > 5$
 $3x + 2 > 5$
 $3x > 5 - 2$
 $3x > 3$
 $x > 1$



ii)
$$3x + 2 < 0$$

i)
$$3x + 2 \ge 0$$
, $3x \ge -2$, $x \ge -\frac{2}{3}$
 $(3x + 2) > 5$
 $3x + 2 > 5$
 $3x > 5 - 2$
 $3x > 3$
 $x > 1$



ii)
$$3x + 2 < 0$$
, $3x < -2$

i)
$$3x + 2 \ge 0$$
, $3x \ge -2$, $x \ge -\frac{2}{3}$
 $(3x + 2) > 5$
 $3x + 2 > 5$
 $3x > 5 - 2$
 $3x > 3$
 $x > 1$

$$-\frac{2}{3} \qquad 1$$

$$\therefore x > 1$$

ii)
$$3x + 2 < 0$$
, $3x < -2$, $x < -\frac{2}{3}$

i)
$$3x + 2 \ge 0$$
, $3x \ge -2$, $x \ge -\frac{2}{3}$
 $(3x + 2) > 5$
 $3x + 2 > 5$
 $3x > 5 - 2$
 $3x > 3$
 $x > 1$

$$-\frac{2}{3} \qquad 1$$

$$\therefore x > 1$$

ii)
$$3x + 2 < 0$$
, $3x < -2$, $x < -\frac{2}{3}$
- $(3x + 2)$ > 5

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$$3x + 2 \ge 0$$
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 $(3x + 2) > 5$
 $3x + 2 > 5$
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 $3x > 3$
 $x > 1$

$$-\frac{2}{3} \qquad 1$$

$$\therefore x > 1$$

ii)
$$3x + 2 < 0$$
, $3x < -2$, $x < -\frac{2}{3}$
 $-(3x + 2) > 5$
 $3x + 2 < -5$

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 $3x + 2 > 5$
 $3x > 5 - 2$
 $3x > 3$
 $x > 1$

$$\begin{array}{ccc}
 & & & \\
 & -\frac{2}{3} & & 1 \\
 & \therefore x > 1
\end{array}$$

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$$3x + 2 < 0$$
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$$3x + 2 < 0$$
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$$\begin{array}{ccc}
 & & & \\
 & -\frac{2}{3} & & 1 \\
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\end{array}$$

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$$3x + 2 < 0$$
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$$\begin{array}{ccc}
 & & & \\
 & -\frac{2}{3} & & 1 \\
 & \therefore x > 1
\end{array}$$

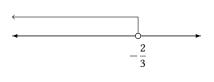
ii)
$$3x + 2 < 0$$
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$$\begin{array}{ccc}
 & & & \\
 & -\frac{2}{3} & & 1 \\
 & \therefore x > 1
\end{array}$$

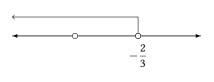
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$$\begin{array}{ccc}
 & & & \\
 & -\frac{2}{3} & & 1 \\
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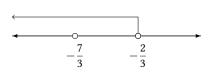


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$$-\frac{2}{3} \qquad 1$$

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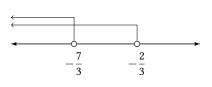
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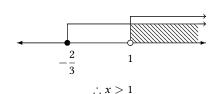
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 & & & \\
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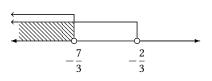
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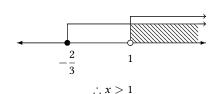
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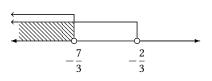
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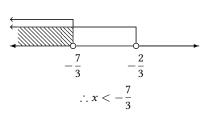
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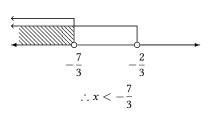
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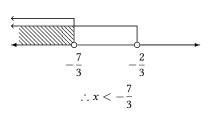
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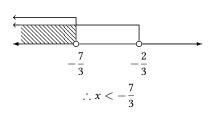
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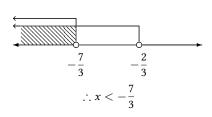




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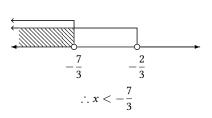




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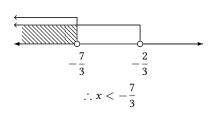




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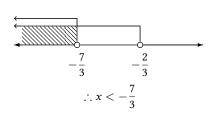




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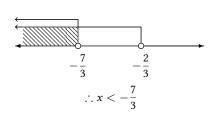


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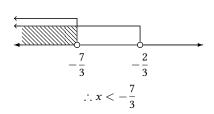


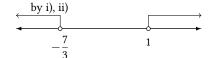


i)
$$3x + 2 \ge 0$$
, $3x \ge -2$, $x \ge -\frac{2}{3}$
 $(3x + 2) > 5$
 $3x + 2 > 5$
 $3x > 5 - 2$
 $3x > 3$
 $x > 1$

$$\begin{array}{ccc}
 & & & \\
 & -\frac{2}{3} & & 1 \\
 & \therefore x > 1
\end{array}$$

ii)
$$3x + 2 < 0$$
, $3x < -2$, $x < -\frac{2}{3}$
 $-(3x + 2) > 5$
 $3x + 2 < -5$
 $3x < -5 - 2$
 $3x < -7$
 $x < -\frac{7}{3}$

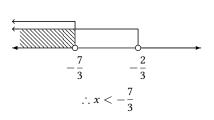




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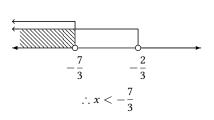




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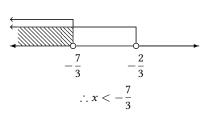


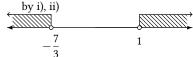


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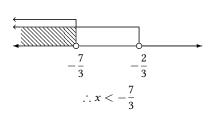


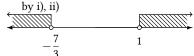
$$\therefore x < -\frac{7}{3} \quad \text{or} \quad x > 1$$

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$$\therefore x < -\frac{7}{3} \quad \text{or} \quad x > 1$$

Github:

https://min7014.github.io/math20210422001.html

Click or paste URL into the URL search bar, and you can see a picture moving.