Latex Example, Equation Cases

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1 Two Cases

```
x =
\begin{cases*}
    -x           & if  $x < 0 $  \\
    \phantom{-}x & if  $x\ge 0$
\end{cases*}
```

$$x = \begin{cases} -x & \text{if } x < 0 \\ x & \text{if } x \geq 0 \end{cases}$$

$$x = \begin{cases} -x & \text{if } x < 0 \\ x & \text{if } x \geq 0 \end{cases} \tag{1}$$

*https://fanwangecon.github.io, repository: Tex4Econ

2 Two Cases, Same Line

```
\begin{equation*}
f(x) = \begin{cases}
             0  & \text{if } x < 0 \\
             1  & \text{if } x \ge 0
       \end{cases} \quad
g(x) = \begin{cases}
             f(x)+1  & \text{if } x < 0 \\
             f(x)-1  & \text{if } x \ge 0
       \end{cases}
\end{equation*}
```

$$f(x) = \begin{cases} 0 & \text{if } x < 0 \\ 1 & \text{if } x \ge 0 \end{cases} \quad g(x) = \begin{cases} f(x)+1 & \text{if } x < 0 \\ f(x)-1 & \text{if } x \ge 0 \end{cases}$$

$$f(x) = \begin{cases} 0 & \text{if } x < 0 \\ 1 & \text{if } x \ge 0 \end{cases} \quad g(x) = \begin{cases} f(x)+1 & \text{if } x < 0 \\ f(x)-1 & \text{if } x \ge 0 \end{cases} \tag{2}$$

case star

$$f(x) = \begin{cases} 0 & \text{if } x < 0 \\ 1 & \text{if } x \ge 0 \end{cases} \quad g(x) = \begin{cases} f(x)+1 & \text{if } x < 0 \\ f(x)-1 & \text{if } x \ge 0 \end{cases} \tag{3}$$

3 Cases with Fraction Large Using Array dcases

Here, we compare the difference between using dcases and cases with fractions.

3.1 cases

$$f(x) = \begin{cases} \frac{a+b}{c+d} & \text{if } \mathrm{x} < 0 \\ 1 & \text{if } \mathrm{x} \geq 0 \end{cases} \tag{4}$$

3.2 dcases

Fraction show up larger

$$f(x) = \begin{cases} \dfrac{a+b}{c+d} & \text{if } \mathrm{x} < 0 \\ 1 & \text{if } \mathrm{x} \geq 0 \end{cases} \tag{5}$$