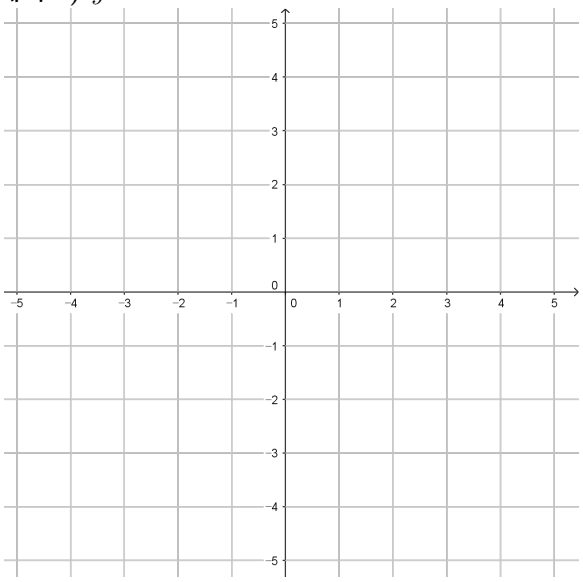
수지 : 함수의 극한 복습

2018년 5월 13일

예시 1) $y = x^2 - 4$



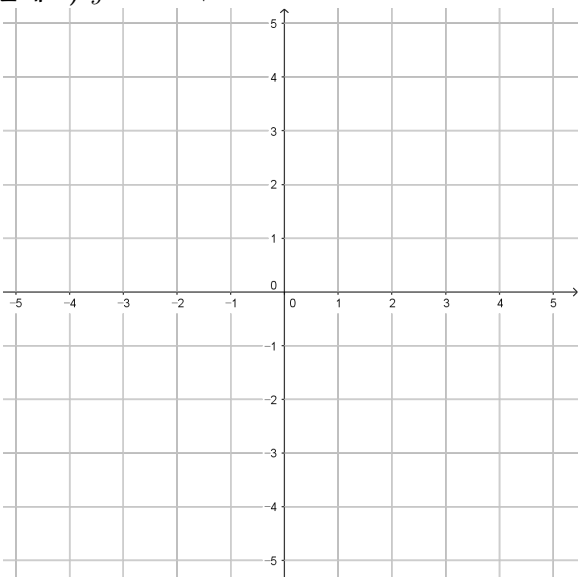
$$\lim_{x \to 1}(x^2 - 4) =$$

$$\lim_{x \to 0}(x^2 - 4) =$$

$$\lim_{x \to \infty}(x^2 - 4) =$$

$$\lim_{x \to -\infty}(x^2 - 4) =$$

문제 2) $y = -x^2 + 4$



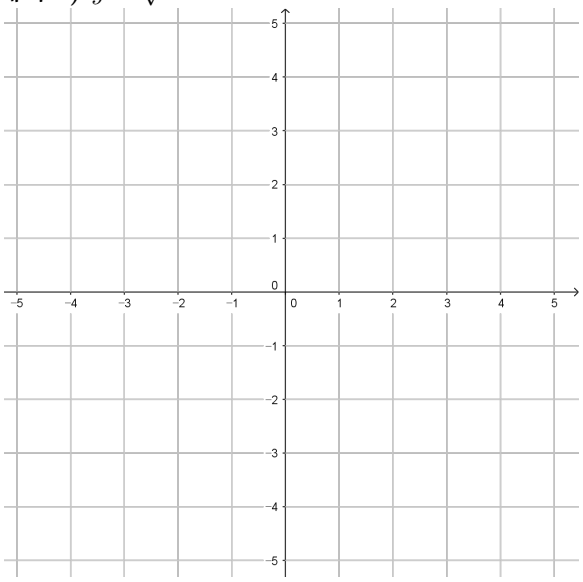
$$\lim_{x \to 1}(-x^2 + 4) =$$

$$\lim_{x \to 2}(-x^2 + 4) =$$

$$\lim_{x \to \infty}(-x^2 + 4) =$$

$$\lim_{x \to -\infty}(-x^2 + 4) =$$

예시 3) $y = \sqrt{x}$

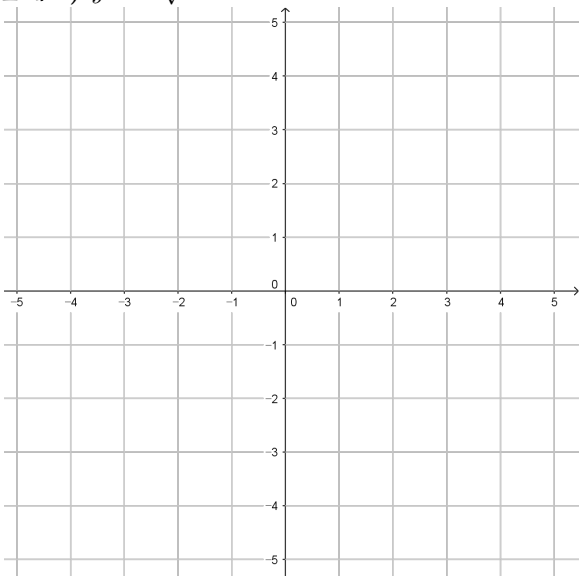


$$\lim_{x \to 4} \sqrt{x} =$$

$$\lim_{x \to 3} \sqrt{x} =$$

$$\lim_{x \to \infty} \sqrt{x} =$$

문제 4) $y = -\sqrt{x}$

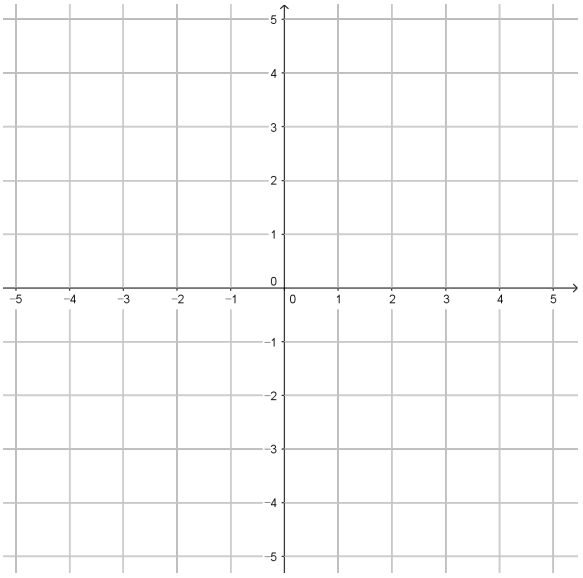


$$\lim_{x \to 1} (-\sqrt{x}) =$$

$$\lim_{x \to 3} (-\sqrt{x}) =$$

$$\lim_{x \to \infty} (-\sqrt{x}) =$$

예시 5) $y = \frac{2x+1}{x-1}$



$$\lim_{x \to 2} \frac{2x+1}{x-1} =$$

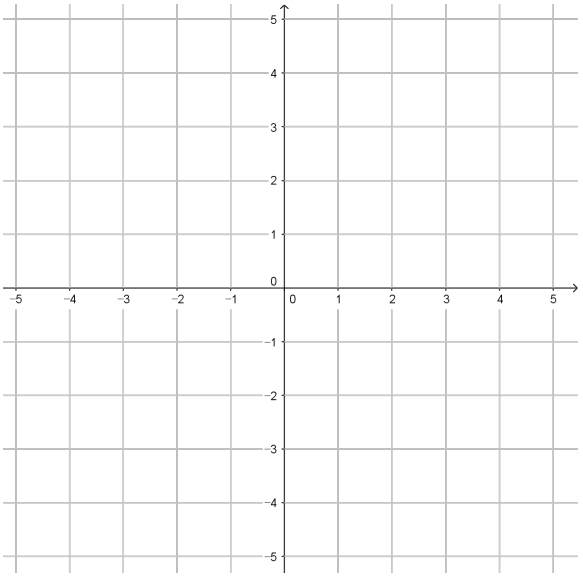
$$\lim_{x \to \infty} \frac{2x+1}{x-1} =$$

$$\lim_{x \to -\infty} \frac{2x+1}{x-1} =$$

$$\lim_{x \to 1+} \frac{2x+1}{x-1} =$$

$$\lim_{x \to 1-} \frac{2x+1}{x-1} =$$

문제 6) $y = \frac{2x-3}{x-2}$



$$\lim_{x \to 1} \frac{2x-3}{x-2} =$$

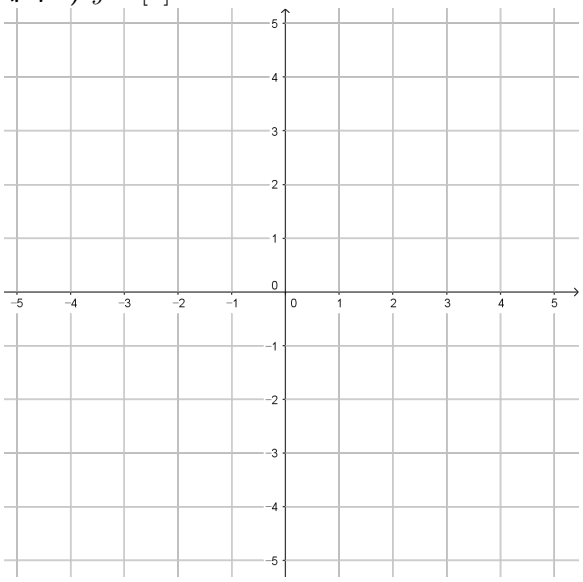
$$\lim_{x \to \infty} \frac{2x-3}{x-2} =$$

$$\lim_{x \to -\infty} \frac{2x-3}{x-2} =$$

$$\lim_{x \to 2+} \frac{2x-3}{x-2} =$$

$$\lim_{x \to 2-} \frac{2x-3}{x-2} =$$

예시 7) $y = [x]$



$$\lim_{x\to\frac{3}{2}}[x] =$$

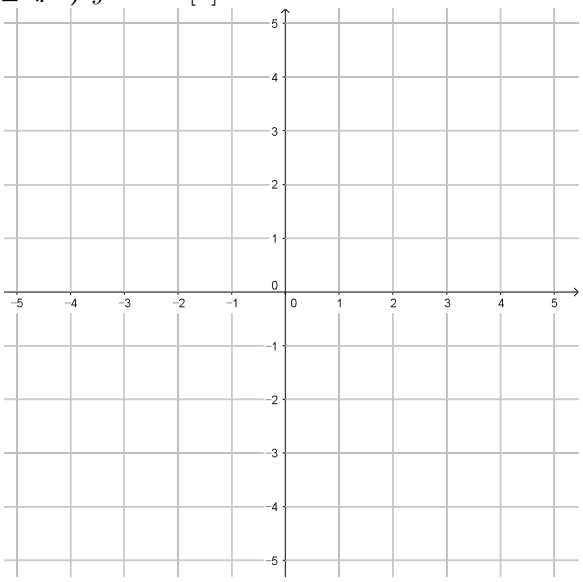
$$\lim_{x\to 1+}[x] =$$

$$\lim_{x\to 1-}[x] =$$

$$\lim_{x\to -1+}[x] =$$

$$\lim_{x\to -1-}[x] =$$

문제 8) $y = x - [x]$



$$\lim_{x\to\frac{3}{2}}(x-[x]) =$$

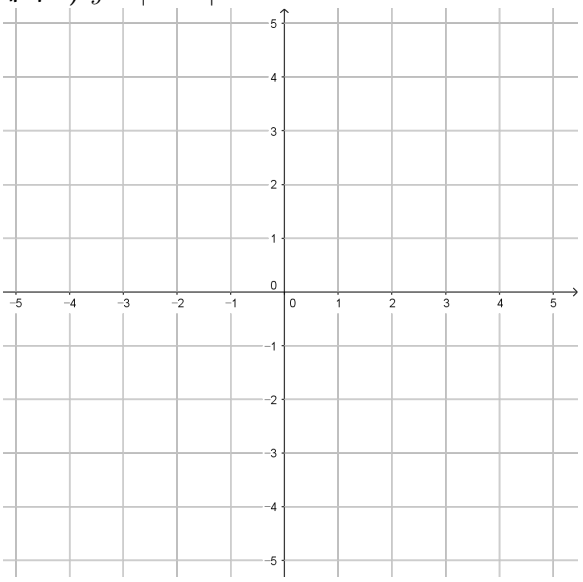
$$\lim_{x\to 1+}(x-[x]) =$$

$$\lim_{x\to 1-}(x-[x]) =$$

$$\lim_{x\to -1+}(x-[x]) =$$

$$\lim_{x\to -1-}(x-[x]) =$$

예시 9) $y = |x-2|$



$$\lim_{x\to 1}|x-2| =$$

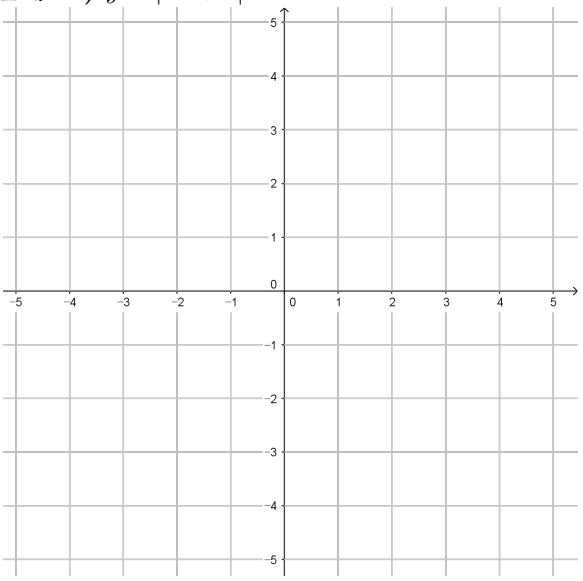
$$\lim_{x\to 2}|x-2| =$$

$$\lim_{x\to 3}|x-2| =$$

$$\lim_{x\to\infty}|x-2| =$$

$$\lim_{x\to -\infty}|x-2| =$$

문제 10) $y = |2x+2|$



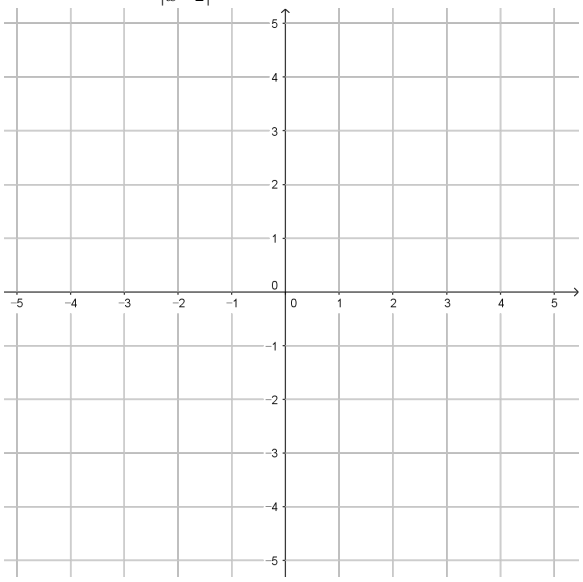
$$\lim_{x\to -1}|2x+2| =$$

$$\lim_{x\to 2}|2x+2| =$$

$$\lim_{x\to\infty}|2x+2| =$$

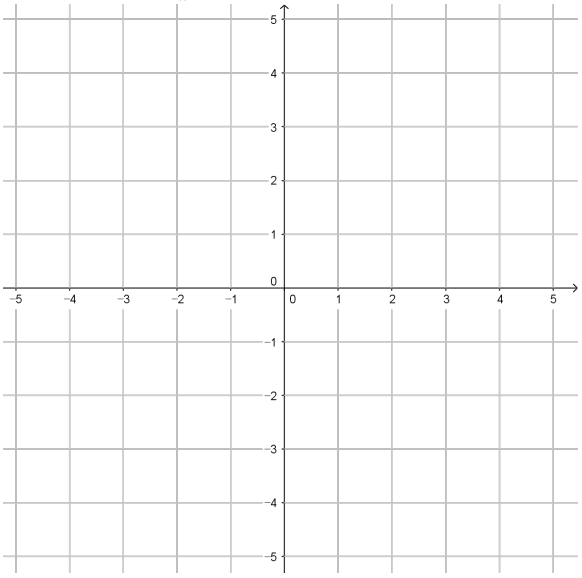
$$\lim_{x\to -\infty}|2x+2| =$$

예시 11) $y = \frac{x-2}{|x-2|}$



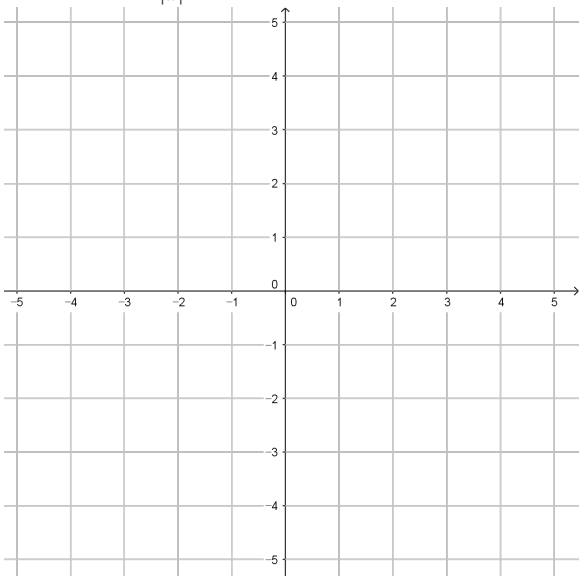
$$\lim_{x\to 1} \frac{x-2}{|x-2|} =$$
$$\lim_{x\to 3} \frac{x-2}{|x-2|} =$$
$$\lim_{x\to 2+} \frac{x-2}{|x-2|} =$$
$$\lim_{x\to 2-} \frac{x-2}{|x-2|} =$$

예시 13) $y = \frac{x^2+x-2}{x-1}$



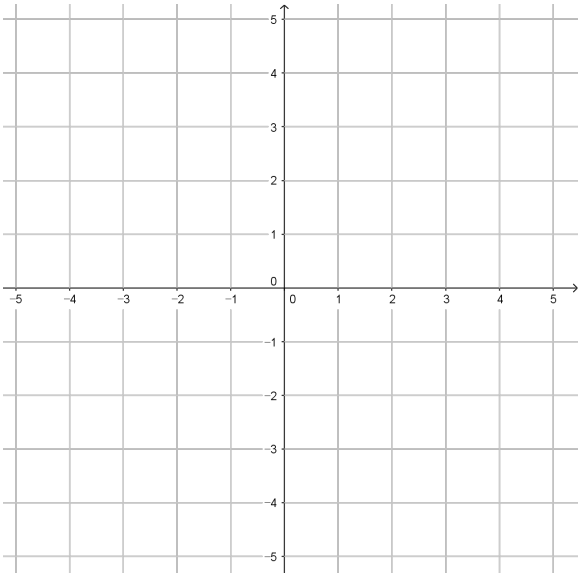
$$\lim_{x\to 0} \frac{x^2+x-2}{x-1} =$$
$$\lim_{x\to 2} \frac{x^2+x-2}{x-1} =$$
$$\lim_{x\to 1+} \frac{x^2+x-2}{x-1} =$$
$$\lim_{x\to 1-} \frac{x^2+x-2}{x-1} =$$

문제 12) $y = \frac{x}{|x|}$



$$\lim_{x\to -2} \frac{x}{|x|} =$$
$$\lim_{x\to 3} \frac{x}{|x|} =$$
$$\lim_{x\to 0+} \frac{x}{|x|} =$$
$$\lim_{x\to 0-} \frac{x}{|x|} =$$

문제 14) $y = \frac{x^2-3x+2}{x-2}$



$$\lim_{x\to 1} \frac{x^2-3x+2}{x-2} =$$
$$\lim_{x\to 3} \frac{x^2-3x+2}{x-2} =$$
$$\lim_{x\to 2+} \frac{x^2-3x+2}{x-2} =$$
$$\lim_{x\to 2-} \frac{x^2-3x+2}{x-2} =$$