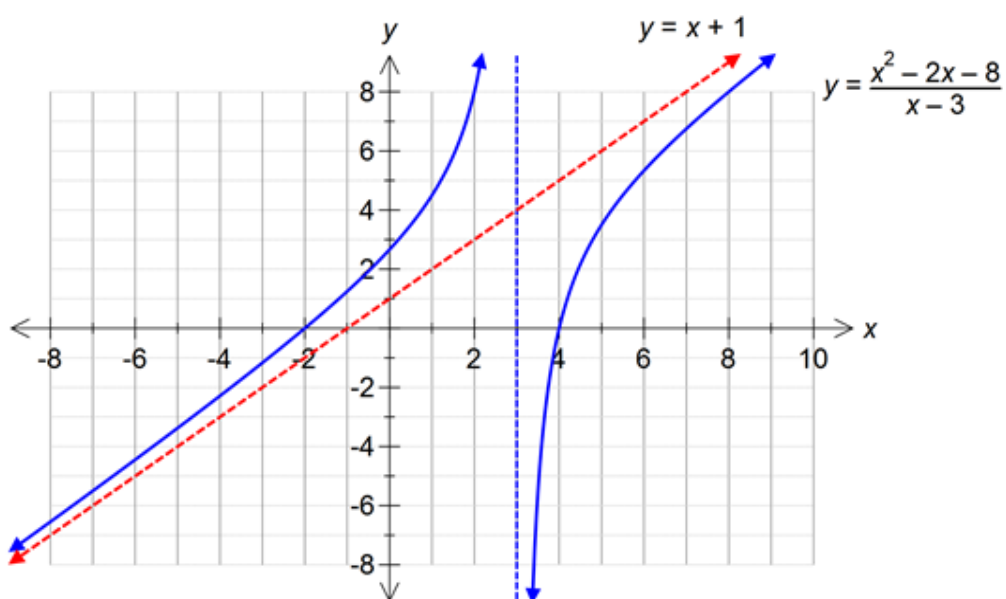


## Lesson 2.9: Oblique Asymptotes

↳ Investigate the end behavior of the function using limits to identify possible oblique asymptotes.

### Question:

When will oblique asymptotes occur?



As  $x \rightarrow \infty$  or  $x \rightarrow -\infty$  the distance between \_\_\_\_\_

and \_\_\_\_\_ approaches \_\_\_\_\_

Oblique Asymptote:

Example 1 

Determine the oblique asymptote for  $f(x) = \frac{x^2 - 2x - 8}{x - 3}$



Example 2 

Determine the oblique asymptote for  $f(x) = \frac{2x^3 + 4x^2 - 9}{3 - x^2}$

