

# Arrow examples

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$$a \text{ --- } b$$

$$a \Rightarrow b$$

$$a \overset{f}{\rightarrow} b$$

$$a \overset{\text{oooooooooooo}}{\longrightarrow} b$$

$$a \overset{\text{oooooooooooo}}{\rightrightarrows} b$$

$$P \overset{\text{By Yoneda}}{\rightrightarrows} Q$$

$$a = b$$

$$X \overset{p}{\twoheadrightarrow} Y$$

$$X \overset{\text{hom}}{\rightrightarrows} Y$$

$$X \overset{\exists f}{\twoheadrightarrow} Y$$

$$X \overset{f}{\Rightarrow} Y$$

$$A \overset{R}{\curvearrowright} B$$

$$A \overset{R}{\rightrightarrows} B$$

$$A \overset{i}{\hookrightarrow} B$$

$$A \ni x \xrightarrow{g \circ f} y \in B$$

The diagram shows a word  $X$  enclosed in a red box. To its right, a dashed line indicates a split. The prefix  $f$  is enclosed in a red box, and the suffix is enclosed in a green box.

$$X \stackrel{P}{\mapsto} Y$$