



$$\mathcal{E}\left(\int^{c\in\mathcal{C}} D(Kc, -) \cdot Fc, G(-)\right) = \int_{c\in\mathcal{C}} \mathit{Set}^{\mathcal{D}}(D(Kc, -), \mathcal{E}(Fc, G(-))) = \int_{c\in\mathcal{C}} \mathcal{E}(Fc, GKc) =$$

BEFORE

1 A 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

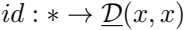


$$h_A F(G) = \int^{c \in C} \text{Set}^C(h^A(c), G) \cdot Fc = \int^{c \in C} Gc \cdot Fc$$





2020-2021





MAPS OF THE
ARIZONA
RANGE

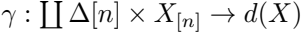
$$\left(\coprod_{f:[n]\rightarrow[m]}\Delta[n]\times X[m]\right)\xrightarrow[f^*]{f_*}$$

$$\left(\prod_n \Delta[n] \times X[n] \right)$$

$$\xrightarrow{f_* \times id}$$

$$\Delta(-, n) \Big|_{\Delta(-, n) \times X^{[m]}} \times X^{[m]}$$

$$\Delta(-, n) \times X^{[n]}$$





$$(\Delta[n] \times X_{[n]} \amalg \Delta[n] \times X_{[n]})([n])$$

$$(f_*([n] \xrightarrow{\tau} [n]) \times x \sim [n] \xrightarrow{\tau} [n] \times f^*(x))$$



$$[m] \xrightarrow{\quad} [n] \times x \stackrel{=}{=} \pi_*([m] \xrightarrow{\quad} [n])$$







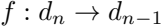
$$\coprod_{f:[n]^{op} \rightarrow [m]^{op}} \left(\coprod_{\vec{d}:[n] \rightarrow D} Gd_n \otimes Fd_o \right) \stackrel{fold}{=} \coprod_n \left(\coprod_{\vec{d}:[n] \rightarrow D} Gd_n \otimes Fd_o \right)$$



$$\coprod_{f:d_0 \rightarrow d_n} Gd_n \otimes Fd_0$$

$$(x \sim (Gf \otimes Id)(x) \sim (Id \otimes Ff)(x) \mid x \in Gd_n \otimes Fd_0)$$

$$\begin{array}{ccc}
 Gd_n \otimes Fd_0 & & Gd_{n-1} \otimes Fd_0 \\
 \downarrow Id & \searrow Gf \otimes Id & \\
 Gd_n \otimes Fd_0 & &
 \end{array}$$



[illegible]