

Sec 1.5 Inverse Functions

Learning Goal: We will review the concept of an Inverse Function, its equation creation, and its graph creation.

1/ Reflection in line $y=x$

Notation:

$$y = f(x)$$

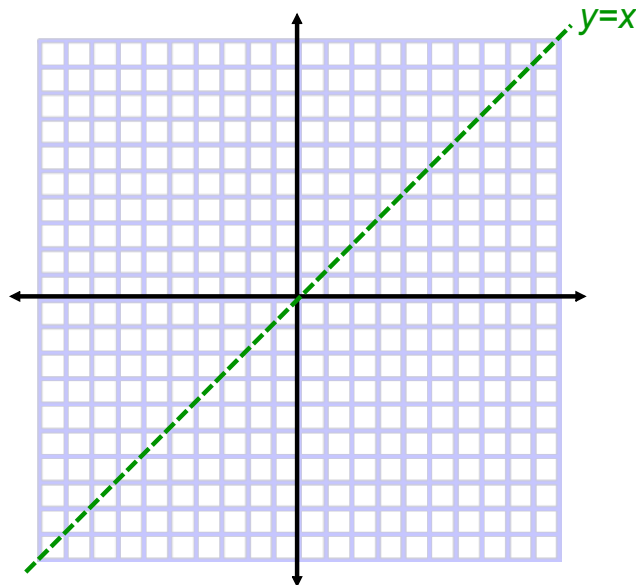
inverse is $f^{-1}(x)$

2/ Switch x and y

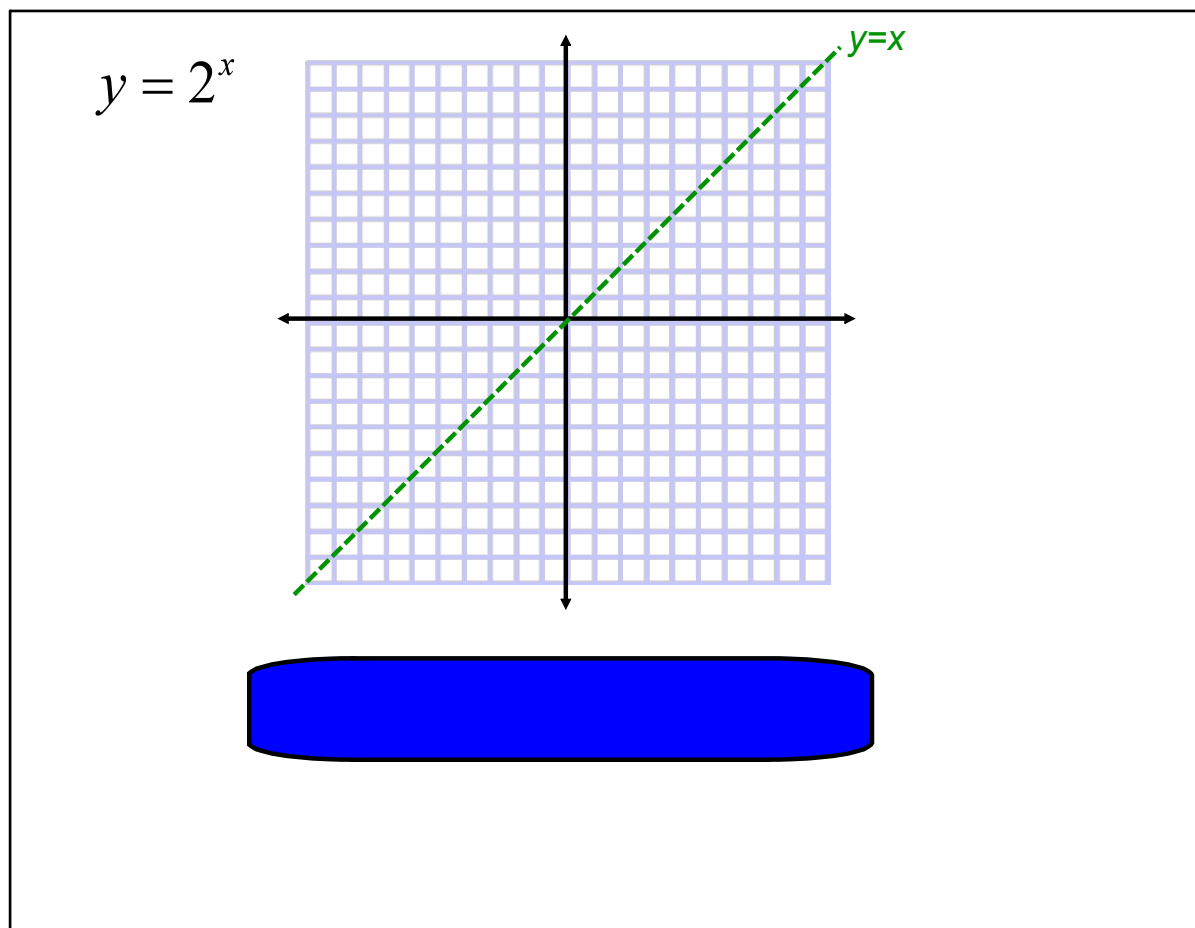
$$y = kx \rightarrow x = ky$$

Sep 14-9:27 AM

$$y = x^2$$



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Inverse

⇒ switch x and y

⇒ switch domain and range

⇒ switch x and y in end behaviours

Sep 14-10:00 AM

What about the inverse of $y = \frac{1}{x}$

Rational function parent



What about the inverse of transformed rational?

$$y = \frac{2}{x+1} - 3$$

Rational function inverse



Sep 14-1:32 PM

p43 #1ace, 2a, 3,
6abd, 10

Sep 14-9:28 AM

Attachments

Rational function parent.gsp

Rational function inverse.gsp