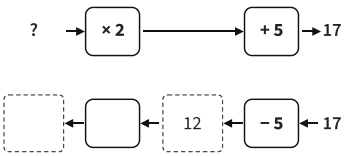
Inverse Functions

1

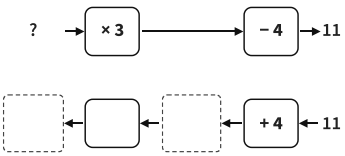
This function machine gives 17.
Find the number that went in.



Answer _____

2

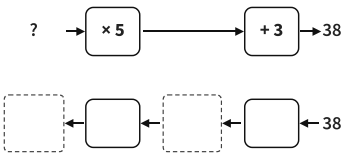
This function machine gives 11.
Find the number that went in.



Answer _____

3

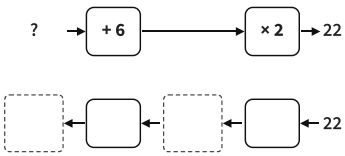
This function machine gives 38.
Find the number that went in.



Answer _____

4

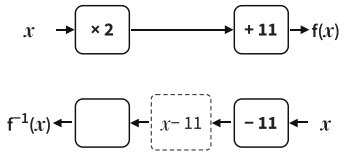
This function machine gives 22.
Find the number that went in.



Answer _____

5

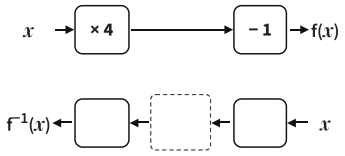
$f(x) = 2x + 11$. Find $f^{-1}(x)$.



$f^{-1}(x)$ = _____

6

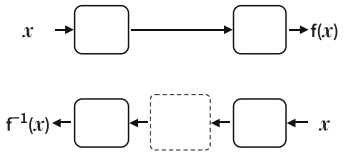
$f(x) = 4x - 1$. Find $f^{-1}(x)$.



$f^{-1}(x)$ = _____

7

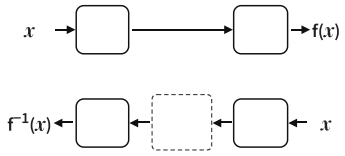
$f(x) = 6x + 5$. Find $f^{-1}(x)$.



$f^{-1}(x)$ = _____

8

$f(x) = 4(x + 1)$. Find $f^{-1}(x)$.



$f^{-1}(x)$ = _____

Inverse Functions *further practice*

9

$f(x) = 7x - 2$. Find $f^{-1}(x)$.

Answer _____

10

$f(x) = \frac{x}{2} + 5$. Find $f^{-1}(x)$.

Answer _____

11

$f(x) = 4x + 9$. Find $f^{-1}(25)$.

Answer _____

12

$f(x) = \frac{x+8}{3}$. Find $f^{-1}(x)$.

Answer _____

13

A taxi costs £3 plus £2 a mile. The cost in pounds for x miles is $f(x) = 2x + 3$.
Find $f^{-1}(x)$. Use it to find how far a £27 ride went.

Answer _____

14

A rough rule changes °C to °F: double, then add 30. So $f(x) = 2x + 30$.
Find $f^{-1}(x)$. Use it to change 70°F roughly to °C.

Answer _____

15

$f(x) = 3x - 5$. Solve $f^{-1}(x) = 4$.

Answer _____

16

$f(x) = 4x - 8$. Tom says $f^{-1}(x) = \frac{x}{4} + 8$.
Is Tom right? Explain.

Answer _____