

- Describe the graph of $f(x) = (1-x)^2 + 3$.

FIRST NOTICE THAT

$$(1-x)^2 = (x-1)^2$$

So we'll graph $y = (x-1)^2 + 3$.

THE graph of f IS THE graph OF $y = x^2$
WITH THE FOLLOWING SEQUENCE OF
TRANSFORMATIONS:

① START WITH THE graph OF $y = x^2$

① SHIFT RIGHT 1 UNIT: $y = (x-1)^2$

② SHIFT UP 3 UNITS: $y = (x-1)^2 + 3$

So, THE graph OF f IS THE graph OF $y = x^2$ SHIFTED

1 UNIT RIGHT & 3 UNITS UP.

GRAPH LOOKS LIKE

