The graph of a function \( y = f(x) \) is translated 4 units down. If the equation of its image has the form \( y - d = f(x) \), determine the value of “c”.

2.8 Comparing \( y = f(x) \) to \( y - k = f(x) \)

\[ y - 3 = |x| \]

\[ y + 7 = |x| \]

1. The graph of a function \( y = f(x) \) is translated as described below. The equation of its image has the form \( y = f(x) + d \). Determine the value of \( d \) for each transformation.

   a) Translate the graph 6 units down.
   b) Translate the graph 1 unit up.

2. The graph of a function \( y = f(x) \) is translated as described below. The equation of its image has the form \( y - k = f(x) \). Determine the value of \( d \) for each transformation.

   a) Translate the graph 7 units up.
   b) Translate the graph 13 units down.

2.10 Example 1

Sketch the graph of the function: \( y = \sqrt{x + 3} - 4 \)