## 5-3 Reteach to Build Understanding

## Graphing Radical Functions

1. Match each graph with a radical function.
a. $h(x)=\sqrt{x-3}$
(1)

b. $h(x)=\sqrt{x-3}+4$
c. $h(x)=\sqrt{x-3}-4$
(2)

(3)

2. Damian wrote a radical function that is represented by the graph. Describe the error he made. Then, write the correct function.

Damian's Function: $f(x)=\sqrt{x+2}$

3. Fill in the blanks to find the transformations of the parent function for $g(x)=\sqrt{25(x-5)}+11$.

| Step 1. $g(x)=\sqrt{25(x-5)}+11$ | Factor out 25 among the <br> terms of radicand. |
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| Step 2. | Write the radicand as the <br> product of its factors. |
| Step 3. | Take the square root of 25. | | The graph of the parent function $f$ is |
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| stretched vertically by a factor of 5. |
| Then the stretched graph is translated |
| 5 units to the right and 11 units up. |, | Step 4. The parent function is |
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