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## Chapter 4 Self-Assessment

| Concept | BEFORE | DURING (What I can do) | AFTER (Proof that I can do this) |
| :---: | :---: | :---: | :---: |
| 4.1 |  |  |  |
| I can describe the relationship between the roots of a quadratic equation, the zeros of the corresponding quadratic function, and the $x$-intercepts of the graph of the quadratic function. | $\square$ No, not yet <br> $\square$ Some <br> $\square$ Yes | $\square$ No, not yet <br> $\square$ Some <br> $\square$ Yes | No, not yet <br> $\square$ Some <br> $\square$ Yes |
| I can solve quadratic equations by graphing the corresponding quadratic function. | No, not yet <br> $\square$ Some <br> $\square$ Yes | No, not yet <br> $\square$ Some <br> $\square$ Yes | No, not yet <br> $\square$ Some <br> $\square$ Yes |
| I can solve a problem by analysing a quadratic function. | $\square$ No, not yet <br> $\square$ Some <br> $\square$ Yes | No, not yet <br> $\square$ Some <br> $\square$ Yes | No, not yet <br> $\square$ Some <br> $\square$ Yes |
| 4.2 |  |  |  |
| I can factor a variety of quadratic expressions. | $\square$ No, not yet <br> $\square$ Some <br> $\square$ Yes | No, not yet <br> - Some <br> $\square$ Yes | $\square$ No, not yet <br> $\square$ Some <br> $\square$ Yes |
| I can solve quadratic equations by factoring. | $\square$ No, not yet <br> $\square$ Some <br> $\square$ Yes | No, not yet <br> $\square$ Some <br> $\square$ Yes | $\square$ No, not yet <br> $\square$ Some <br> $\square$ Yes |
| I can solve problems that involve quadratic equations. | $\square$ No, not yet <br> $\square$ Some <br> $\square$ Yes | No, not yet <br> - Some <br> $\square$ Yes | No, not yet <br> $\square$ Some <br> $\square$ Yes |
| I can solve a problem by writing and analysing a quadratic equation. | No, not yet <br> $\square$ Some <br> $\square$ Yes | No, not yet Some Yes | No, not yet Some Yes |

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BLM 4-1
(continued)

| Concept | BEFORE | DURING <br> (What I can do) | AFTER (Proof that I can do this) |
| :---: | :---: | :---: | :---: |
| 4.3 |  |  |  |
| I can solve quadratic equations by determining square roots. | No, not yet <br> $\square$ Some <br> $\square$ Yes | No, not yet <br> $\square$ Some <br> $\square$ Yes | No, not yet <br> $\square$ Some <br> $\square$ Yes |
| I can solve quadratic equations by completing the square. | $\square$ No, not yet <br> $\square$ Some <br> $\square$ Yes | No, not yet <br> $\square$ Some <br> $\square$ Yes | $\square$ No, not yet <br> - Some <br> $\square$ Yes |
| I can verify my solution to a quadratic equation. | No, not yet <br> $\square$ Some <br> $\square$ Yes | No, not yet <br> $\square$ Some <br> $\square$ Yes | No, not yet <br> $\square$ Some <br> $\square$ Yes |
| 4.4 |  |  |  |
| I understand how the quadratic formula is developed. | No, not yet <br> $\square$ Some <br> $\square$ Yes | $\square$ No, not yet <br> $\square$ Some <br> $\square$ Yes | $\square$ No, not yet <br> $\square$ Some <br> $\square$ Yes |
| I can use the quadratic formula to solve quadratic equations. | No, not yet <br> $\square$ Some <br> $\square$ Yes | $\square$ No, not yet <br> - Some <br> $\square$ Yes | No, not yet <br> $\square$ Some <br> $\square$ Yes |
| I can use the discriminant to determine the nature of the roots of a quadratic equation. | No, not yet <br> $\square$ Some <br> $\square$ Yes | No, not yet <br> $\square$ Some <br> $\square$ Yes | No, not yet <br> $\square$ Some <br> $\square$ Yes |
| I can select an appropriate method for solving a quadratic equation. | $\square$ No, not yet <br> $\square$ Some <br> $\square$ Yes | $\square$ No, not yet <br> $\square$ Some <br> $\square$ Yes | $\square$ No, not yet <br> $\square$ Some <br> $\square$ Yes |
| I can justify my choice of strategy for solving a quadratic equation. | No, not yet <br> $\square$ Some <br> $\square$ Yes | No, not yet <br> $\square$ Some <br> $\square$ Yes | $\begin{aligned} & \text { No, not yet } \\ & \square \text { Some } \\ & \text { Yes } \end{aligned}$ |
| I can solve problems involving quadratic equations. | No, not yet <br> $\square$ Some <br> $\square$ Yes | No, not yet <br> $\square$ Some <br> $\square$ Yes | No, not yet <br> $\square$ Some <br> $\square$ Yes |

