NAME:

**Unit 3: Radicals Final Review Assignment**



This assignment includes multiple choice and short answer questions. For multiple choice questions, select the best answer. Each is worth 1 mark. Marks assigned to short answer questions are indicated for each question. Be sure to show all necessary work.

*Use the following radical expression to answer questions 1 and 2.*



**/1**\_\_\_\_1. The restriction on *x* is

 A. 

 B. 

 C. 

 D. 

 Answer:

**/1**\_\_\_\_2. When expanded and simplified, is

 A. 

 B. 

 C. 

 D. 

 Answer:

**/1\_\_\_** 3. In its most simplified form, the expression  is

 A. 

 B. 

 C. 

 D. 

 Answer:

*Use the following radical equation to answer questions 4 and 5.*



**/1\_\_\_** 4. The restriction on *b* is

 A. 

 B. 

 C. 

 D. 

 Answer:

**/3** 5. Determine the solution(s) to the radical equation above. Show all work, and verify the

 solution(s).

 Answer:

6. Police can estimate the speed a car had been travelling using the length of the skid marks.

 One formula used for this purpose is , where *v* is the speed, in

 kilometres per hour, and *d* is the length of the skid marks, in metres.

**/1** a. Solve the formula for *d*.

 Answer:

**/1** b. For a car braking from a speed of 90 km/h, determine the length of the kids marks, to the

 nearest metre.

 Answer:

**/1** c. What would have been the speed of a car, to the nearest kilometre per hour, that would

 have resulted in 150 m skid marks?

 Answer:

**/10**