Regents Exam Questions 8.NS.A.2: Square Roots www.jmap.org

Name:

## 8.NS.A.2: Square Roots

- 1 The expression  $\sqrt{93}$  is a number between
  - 1) 3 and 9
  - 3) 9 and 10 2) 8 and 9 4) 46 and 47
- 2 Which point on the accompanying number line best represents the position of  $\sqrt{5}$ ?

	A BC D
1) A	3) C
2) B	4) D

- 3 The expression  $\sqrt{54-b}$  is equivalent to a positive integer when b is equal to
  - 1) -10 3) 16
  - 2) 54 4) 4

4 The amount of time, t, in seconds, it takes an object to fall a distance, d, in meters, is expressed by the formula  $t = \sqrt{\frac{d}{4.9}}$ . Approximately how long will it take an object to fall 75 meters?

3) 3.9 sec

- 1) 0.26 sec
- 2) 2.34 sec 4) 7.7 sec

## 8.NS.A.2: Square Roots Answer Section

1 ANS: 3 The  $\sqrt{93}$  is between the  $\sqrt{81}$  and  $\sqrt{100}$ , so it is between 9 and 10.

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2 ANS: 3 REF: 010703a 3 ANS: 1

3 ANS: 1  
$$\sqrt{54 - (-10)} = \sqrt{64} = 8$$

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$$t = \sqrt{\frac{d}{4.9}} = \sqrt{\frac{75}{4.9}} \approx 3.9$$

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