**ISTEP REVIEW # 5 Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Due Date: \_\_\_\_\_\_\_\_\_\_\_\_\_**

1. The Chief sells ice cream cones for $ 3.50 and banana splits for $5. On a hot summer day, the shop sold 8 more ice cream cones than banana splits and made $240.50. How many ice cream cones and banana splits were sold?
2. Define the variables for the problem.
3. Write two equations.
4. Solve the equations. Solutions \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 2) Write the domain and range for the following functions.

 A)$\{\left(-1, 3\right), \left(4,2\right),\left(-10,10\right), \left(2,10\right), \left(5, 6\right)\}$ D:

 R:

 B)

  D:

 R:

 3) Which expression is equivalent to ?

1.  b)  c)  d) 

4) A penny is dropped from a balcony and takes approximately 3.7 seconds to reach the ground. The graph below shows the speed of the penny throughout its fall.

1. What is the y-intercept? \_\_\_\_\_\_\_\_\_\_\_\_
2. What does the y-intercept represent? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. How fast is the coin moving when it hits the ground?

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5) Jimmy bought an ice-cream cone from The Chief. It was a waffle cone so it was in the shape of a right circular cone. The cone is 8 inches tall and the radius of the top is 3 inches. Find the volume of the cone to the nearest cubic inch. Volume for right circular cone: 

 6) Circle all the graphs that represent a function.



1. B) C) D) E)