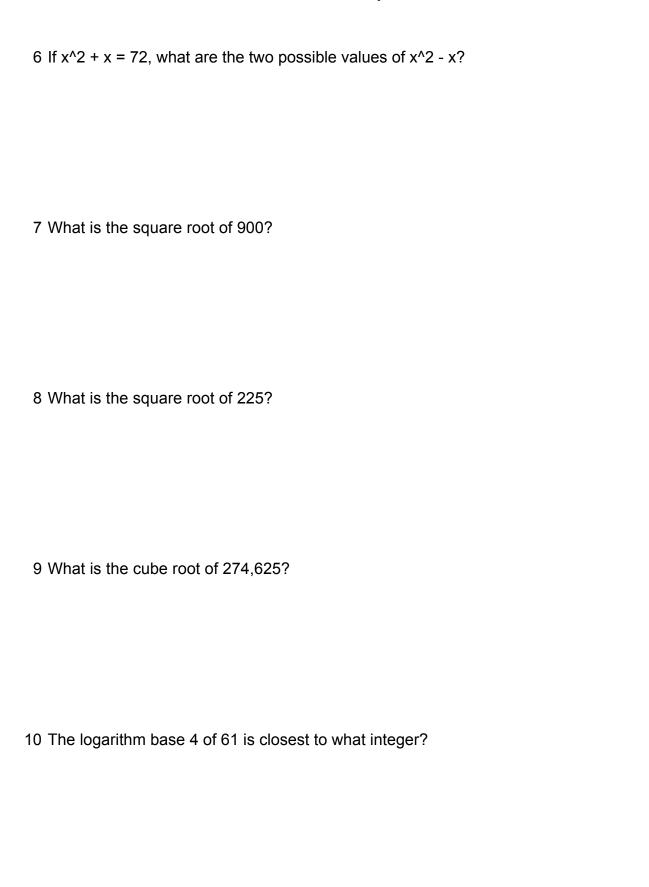
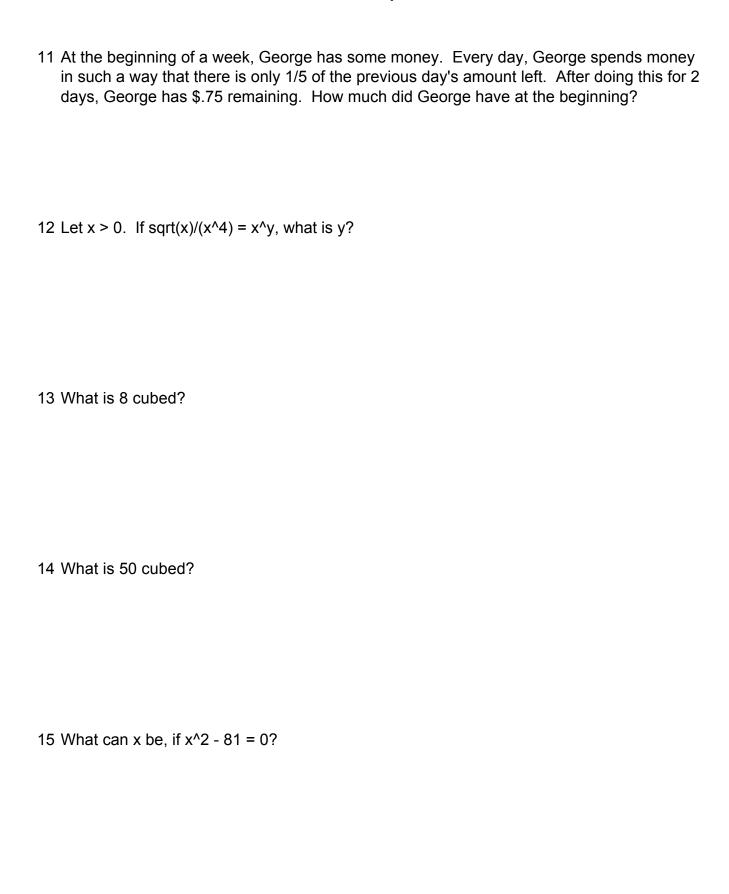
1	What can x be, if x^3 + 1 = 0?	
	A number, u, has 8 added to it to produce a second number. number is -0.8. What is u?	The cube root of the second
	A number, t, has 11 added to it to produce a second number. number is -0.2. What is t?	The fifth root of the second
	A number, s, has 17 added to it to produce a second number. number is 0.7. What is s?	The cube root of the second
	A number, y, has 20 added to it to produce a second number. number is 0.3. What is y?	The fifth root of the second





1	ANSWER: -1. EXPLANATION: The number whose cube is 1 is 1. Because x^3 must be negative, x must also be negative.
2	ANSWER: -8.512. EXPLANATION: The second number is -0.8 cubed, or -0.512. This is 8 greater than u, so we subtract to get the answer.
3	ANSWER: -11.00032. EXPLANATION: The second number is -0.2 to the fifth power, or -0.00032. This is 11 greater than t, so we subtract to get the answer.
4	ANSWER: -16.657. EXPLANATION: The second number is 0.7 cubed, or 0.343. This is 17 greater than s, so we subtract to get the answer.
5	ANSWER: -19.99757. EXPLANATION: The second number is 0.3 to the fifth power, or 0.00243. This is 20 greater than y, so we subtract to get the answer.

6 ANSWER: 8 and -9. EXPLANATION: You can factor x^2 + x to be x(x+1). These are consecutive integers that multiply to a product of 72. The first two such integers that come to mind are 8 and 9, and of course, -9 and -8 form the other solution.
7 ANSWER: 1764
8 ANSWER: 4,900
9 ANSWER: 421,875
10 ANSWER: 3. EXPLANATION: Note that 4^3 = 64, and no other integer power of 4 is anywhere near as close to 61.

11	ANSWER: \$18.75. EXPLANATION: Work the problem backward from the end of the time period. Start with the ending value of \$.75, and multiply by 5 a total of 2 times. Since 5^2 is 25, you can simply multiply \$.75 by 25 to obtain the answer.
12	ANSWER: -3.5. EXPLANATION: The square root of x is $x^{(1/2)}$. You divide powers by subtraction, so the answer is $1/2$ - 4.
13	ANSWER: 512
14	ANSWER: 125000
15	ANSWER: -9 or 9. EXPLANATION: Remember that both negative numbers and positive numbers have positive squares."