

GSE Algebra 1 | Formative Assessment

1. Simplify. $5\sqrt{8}$
2. The first term in an arithmetic sequence is 5. The fourth term in the sequence is -4. The tenth term is -22. Identify a function, f , can be used to find the n th term of the arithmetic sequence.
3. What is $P(x) - Q(x)$?

$$P(x) = x^2 - x - 6$$

$$Q(x) = x - 3$$

4. Solve the system of equations for both x and y . Show or explain how you found your answer in the space provided.

$$x - 3y = 1$$

$$x - 2y = 6$$

5. While riding on a carousel, Angela travels a distance of 65 meters every 15 seconds. What is her speed in kilometers per hour? Show or explain how you found your answer in the space provided.
6. The student council makes an initial investment in a savings account that earns interest. The value of the savings account after m months is determined by the function $v(m) = 2,000(1.005)^m$. The student council also has a checking account that has a value of m months that is determined by the function $c(m) = 250 + 150m$.

Part A: What is the interest rate of the savings account? Write your answer in the space provided.

When the student council has \$2,450 in its checking account, it will purchase new computers for the library.

Part B: After how many months will the student council purchase new computers for the library? Write your answer in the space provided.

Part C: How much money will be in the student council's savings account when they purchase new computers? Explain your reasoning. Write your answer in the space provided.

Student Name: _____ Period: _____

Question 1	
Question 2	
Question 3	
Question 4	
Question 5	
Q6 PA	
Q6 PB	
Q6 PC	