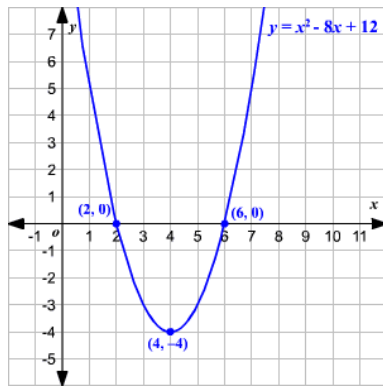


## Do Now:

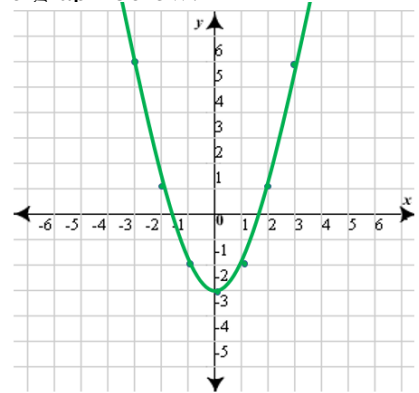
1. Based on the graph below:



a) Identify the roots:

b) In words describe the nature of the roots:

2. Based on the graph below:



a) Identify the roots:

b) In words describe the nature of the roots:

**AIM: SOLVING WORD PROBLEMS USING QUADRATIC EQUATIONS (Day 1)**1. Find three consecutive positive integers such that the product of the 1<sup>st</sup> and second is equal to 20.

Step 1: Write a legend from the question.

$$= 1^{st} C.P.I.$$

$$= 2^{nd} C.P.I.$$

$$= 3^{rd} C.P.I.$$

Step 2: Translate the question into an equation

Step 3: Solve the equation

Step 4: Plug solution into the legend

Step 4: Check

2. The larger of two positive integers is 3 more than the smaller. If the product of the two numbers is 88, what are the two numbers?

Step 1: Write a legend from the question.

Step 2: Translate the question into an equation

Step 3: Solve the equation

Step 4: Plug solution into the legend

Step 4: Check

3. Find three consecutive positive EVEN integers such that the product of the 2<sup>nd</sup> and 3<sup>rd</sup> integer is equal to 22 more than the 1st.

Step 1: Write a legend from the question.

$$= 1^{st} C.P.I.$$

$$= 2^{nd} C.P.I.$$

$$= 3^{rd} C.P.I.$$

Step 2: Translate the question into an equation

Step 3: Solve the equation

Step 4: Plug solution into the legend

Step 4: Check

4. The square of a positive number is 20 more than the number itself. What is the number?

Step 1: Write a legend from the question.

Step 2: Translate the question into an equation

Step 3: Solve the equation

Step 4: Plug solution into the legend

Step 4: Check