

## Mini Check #2.1 PreCalculus

Name \_\_\_\_\_

1. Find all roots using an appropriate method for  $P(x) = x^3 + 2x^2 - 24x$

→ Show all supporting work ←  
no matter which method you choose

2. Find all roots using an appropriate method for  $P(x) = x^4 - 49$

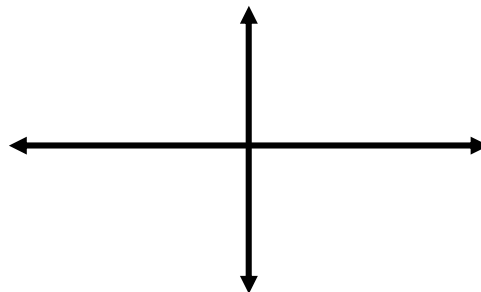
Roots: \_\_\_\_\_

Roots: \_\_\_\_\_

3. Create a polynomial equation,  $P(x)$ , that has as roots  $x = \pm 2$ ,  $x = \pm 2i$

4. If “ $a$ ” and “ $b$ ” are positive real numbers sketch a possible graph of  $P(x) = -x(x-a)^2(x+b)$  and label the points “ $a$ ” and “ $b$ ”

$P(x) =$  \_\_\_\_\_



## Mini Check #2.1 PreCalculus

Name \_\_\_\_\_

1. Find all roots using an appropriate method for  $P(x) = x^3 + 2x^2 - 24x$

→ Show all supporting work ←  
no matter which method you choose

2. Find all roots using an appropriate method for  $P(x) = x^4 - 49$

Roots: \_\_\_\_\_

Roots: \_\_\_\_\_

3. Create a polynomial equation,  $P(x)$ , that has as roots  $x = \pm 2$ ,  $x = \pm 2i$

4. If “ $a$ ” and “ $b$ ” are positive real numbers sketch a possible graph of  $P(x) = -x(x-a)^2(x+b)$  and label the points “ $a$ ” and “ $b$ ”

$P(x) =$  \_\_\_\_\_

