mobius
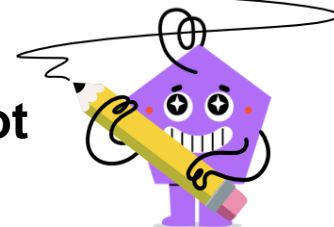
Quadratic Discriminants - Value to Root Example

1 Which roots would be valid for a quadratic function with this discriminant?

$$\Delta = 9$$

A $x = 4$
   $x = -2$

B $x = 7.1$

C $x = \dfrac{1.6 \pm i\sqrt{6.8}}{4.2}$

2 Which roots would be valid for a quadratic function with this discriminant?

$$\Delta = 3$$

A $x = 2.73$
   $x = -0.73$

B $x = 9.3$

C $x = \dfrac{9.4 \pm i\sqrt{9.7}}{7.7}$

3 Which roots would be valid for a quadratic function with this discriminant?

$$\Delta = -9$$

A $x = 7.5$

B $x = 6.6$
   $x = 5.8$

C $x = \dfrac{-3 \pm i\sqrt{9}}{3}$

4 Which roots would be valid for a quadratic function with this discriminant?

$$\Delta = 12$$

A $x = -7.46$
   $x = -0.54$

B $x = 3.9$

C $x = \dfrac{5.5 \pm i\sqrt{2.4}}{2.6}$

5 Which roots would be valid for a quadratic function with this discriminant?

$$\Delta = 7$$

A $x = -1.22$
   $x = 0.55$

B $x = 3.6$

C $x = \dfrac{8.2 \pm i\sqrt{3.1}}{6.2}$

6 Which roots would be valid for a quadratic function with this discriminant?

$$\Delta = 0$$

A $x = 4.6$
   $x = 8.5$

B $x = 0$

C $x = \dfrac{3.8 \pm i\sqrt{7.2}}{5}$

7 Which roots would be valid for a quadratic function with this discriminant?

$$\Delta = 13$$

A $x = 6.61$
   $x = -0.61$

B $x = 8.3$

C $x = \dfrac{5.8 \pm i\sqrt{6.4}}{5.4}$

8 Which roots would be valid for a quadratic function with this discriminant?

$$\Delta = -4$$

A $x = 4.2$
   $x = 9.6$

B $x = 2.1$
   $x = 6.1$

C $x = \dfrac{-2 \pm i\sqrt{4}}{-1}$