

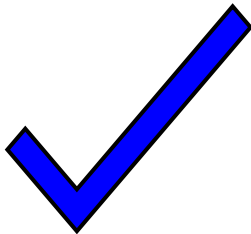


Answer:

3, 6

QUESTION: Solve the equation using square roots.

$$3x^2 + 76 = -8$$

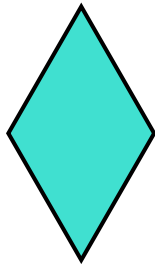


Answer:

$$\pm 2i\sqrt{7}$$

QUESTION: Simplify.

$$\sqrt{-125}$$

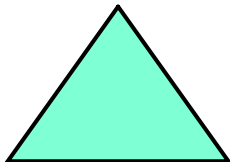


Answer:

$$5i\sqrt{5}$$

### QUESTION:

You are solving a quadratic equation.  
There is only one real solution, so the discriminant must be \_\_\_\_\_.

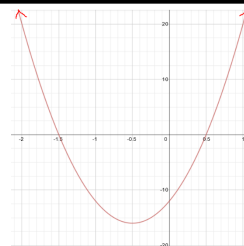


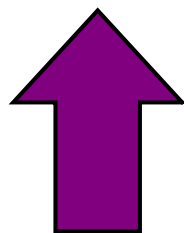
Answer:

0

### QUESTION:

How many solutions does this function have?





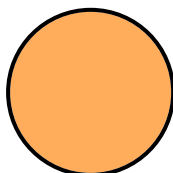
Answer:

2

QUESTION:

Calculate the discriminant to the equation

$$f(x) = 2x^2 - x + 12$$



Answer:

-95

QUESTION:

Simplify and rewrite  
in radical form.

$$\frac{x^4}{x^{\frac{2}{3}}}$$

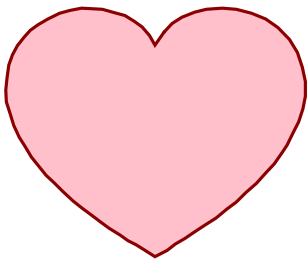


Answer:

$$\sqrt[3]{x^{10}}$$

QUESTION: Solve.

$$|8 - 2x| + 4 = 20$$

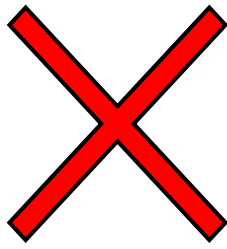


Answer:

$$-4, 12$$

QUESTION:

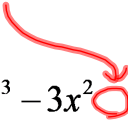
Kali invested \$2500 in a savings account for 3 years. Her investment is modeled by  $s(r) = 2500(1 + r)^3$ , where  $r$  is the annual interest rate written as a decimal and  $s$  is the total of her savings. What interest rate will she need if the value of her investment is to grow to \$8000?



Answer:

0.47

QUESTION: Will the sign on  $5x$  be positive or negative?

$$(2x^3 + 4) - (3x^2 - 5x + 2) = 2x^3 - 3x^2 \text{ } 5x + 2$$


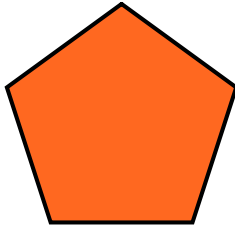


Answer:

Positive

QUESTION: Solve.

$$9x^{\frac{3}{2}} = 72$$

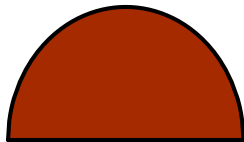


Answer:

4

QUESTION:

If the solutions to a quadratic equation are complex, then the discriminant must be \_\_\_\_\_



Answer:

Negative

QUESTION: Solve.

$$x^2 = 9x - 18$$