

cls6p64

$$-3(x-2)^{4/5} + 29 = -19$$

$$\textcircled{1} \Rightarrow -3(x-2)^{4/5} = -48$$

$$\textcircled{2} \Rightarrow (x-2)^{4/5} = 16$$

$$\textcircled{3} \Rightarrow [(x-2)^{4/5}]^{5/4} = \pm 16^{5/4}$$

$$\textcircled{4} \Rightarrow x-2 = \pm [\sqrt[4]{16}]^5$$

$$\textcircled{5} \Rightarrow x-2 = \pm 2^5$$

$$\textcircled{6} \Rightarrow x-2 = \pm 32$$

$$\textcircled{7} \Rightarrow x = \pm 32 + 2$$

$$\textcircled{8} \Rightarrow x = -32 + 2 \text{ OR } 32 + 2$$

$$\textcircled{9} \Rightarrow x = -30 \text{ OR } 34$$

clsb p 68

$$x^4 - 37x^2 + 36 = 0$$

①  $\Rightarrow$  Let  $w = x^2$ , and  $w^2 = x^4$ , then our original problem becomes

$$w^2 - 37w + 36 = 0$$

②  $\Rightarrow (w-1)(w-36) = 0$

③  $\Rightarrow w = 1$  or  $w = 36$

④  $\Rightarrow$  Now, back-substitute:

$$x^2 = 1 \text{ OR } x^2 = 36$$

⑤  $\Rightarrow x = \pm 1$  or  $x = \pm 6$