

March 31, 2015

$$\sqrt{2} + 5\sqrt{2} = 6\sqrt{2}$$

$$x + 5x$$

$$(1+5)x = 6x$$

Mar 31-9:52 AM

10.4
#7)

$$\sqrt[3]{2} + 8\sqrt[3]{16} - 2\sqrt[3]{54}$$

$$\sqrt[3]{2} + 8 \cdot 2\sqrt[3]{2} - 2 \cdot 3\sqrt[3]{2}$$

$$1 \cdot \sqrt[3]{2} + 16 \cdot \sqrt[3]{2} - 6 \cdot \sqrt[3]{2}$$

$$(1 + 16 - 6) \cdot \sqrt[3]{2}$$

$$11\sqrt[3]{2}$$

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#4)

$$4\sqrt{75} + 3\sqrt{147}$$

$$20\sqrt{3} + 21\sqrt{3}$$

$$41\sqrt{3}$$

Mar 31-10:02 AM

#9)

$$3\sqrt[3]{2} + 8\sqrt{5} + 2\sqrt[3]{54} + \sqrt{125}$$

$$3\sqrt[3]{2} + 8\sqrt{5} + 6\sqrt[3]{2} + 5\sqrt{5}$$

$$9\sqrt[3]{2} + 13\sqrt{5}$$

Mar 31-10:03 AM

10.6

$$\left(\sqrt{2x-3}\right)^2 = (9)^2$$

$$2x-3 = 81$$

$$2x = 84$$

$$x = 42$$

ch
x = 42

$$\sqrt{2(42)-3} = 9$$

$$\sqrt{84-3} = 9$$

$$\sqrt{81} = 9$$

$$9 = 9$$

* must always
Check my
Solutions in
the original
equation.

Mar 31-10:08 AM

$$\sqrt{2x-3} = 9$$

Radical $(\sqrt{2x-3}) - (9)^2 = 0$

$$2x-3-81 = 0$$

Gene $2x-84 = 0$

Mar 31-10:12 AM

$$\left(\sqrt{2x}\right)^2 = (-4)^2$$

$$2x = 16$$

$$\boxed{x = 8} \text{ No Solution}$$

Check
 $x = 8$

$$\sqrt{2(8)} = -4$$

$$\sqrt{16} = -4$$

$$4 \neq -4$$

Mar 31-10:22 AM

$$\left(\sqrt{4-x}\right)^2 = (x-2)^2 \text{ FOIL}$$

$$4-x = (x-2)(x-2)$$

$$= x^2 - 2x - 2x + 4$$

$$4-x = x^2 - 4x + 4$$

$$0 = x^2 - 3x$$

$$0 = x(x-3)$$

Use Zero Factor Thm
 $ab=0$

$$\textcircled{1} \boxed{x=0}$$

$$\textcircled{2} x-3=0 \quad \boxed{x=3}$$

Check
 $x=0$

$$\sqrt{4-0} = 0-2$$

$$\sqrt{4} = -2$$

$$2 \neq -2$$

$x=3$

$$\sqrt{4-3} = 3-2$$

$$\sqrt{1} = 1$$

$$1 = 1$$

Mar 31-10:27 AM

No 10.6 #1-#8

Mar 31-10:48 AM