

$$1. \sqrt{4x-7} + 2 = 5$$

$$\left(\sqrt{4x-7}\right)^2 = (3)^2$$

$$4x - 7 = 9$$

$$\frac{4x}{4} = \frac{16}{4}$$

$$\boxed{x=4}$$

$$3. 5x^{\frac{3}{4}} + 8 = 48$$

$$\frac{5x^{\frac{3}{4}}}{5} = \frac{40}{5}$$

$$\left(x^{\frac{3}{4}}\right)^{\frac{4}{3}} = (8)^{\frac{4}{3}}$$

$$\boxed{x=16}$$

$$5. (4x-8)^{\frac{1}{2}} + 4 = 10$$

$$\left((4x-8)^{\frac{1}{2}}\right)^2 = (6)^2$$

$$4x - 8 = 36$$

$$4x = 44$$

$$\boxed{x=11}$$

$$2. 3x^{\frac{4}{3}} = \frac{243}{3}$$

$$\left(x^{\frac{4}{3}}\right)^{\frac{3}{4}} = (81)^{\frac{3}{4}}$$

$$\boxed{x=27}$$

$$4. \sqrt[4]{x} + 6 = 11$$

$$\left(\sqrt[4]{x}\right)^4 = (5)^4$$

$$\boxed{x=625}$$

$$6. 2(x+12)^{\frac{3}{2}} - 3 = 125$$

$$\frac{2(x+12)^{\frac{3}{2}}}{2} = \frac{128}{2}$$

$$\left((x+12)^{\frac{3}{2}}\right)^{\frac{2}{3}} = (64)^{\frac{2}{3}}$$

$$x+12 = 16$$

$$\boxed{x=4}$$

Exit Slip

$$\cancel{-3} + (8-2x)^{\frac{5}{4}} = 29$$

$+3$ $+3$

$$\left((8-2x)^{\frac{5}{4}} \right)^{\frac{4}{5}} = (32)^{\frac{4}{5}}$$

$$\cancel{8} - 2x = 16$$

$+8$ -8

$$\frac{-2x}{-2} = \frac{8}{-2}$$

$x = -4$