

## Algebra I Homework #8 – Answer Key

1) 3 p.m.

2) 48 pounds

3) 26 gallons

4) 15 quarters, 6 pennies, and 18 dimes

5) 54 gallons

$$6) \quad K = 27 \quad B = \frac{27\sqrt[3]{C}}{D^2}$$

$$7) \quad X = \frac{9Y}{\sqrt{Z}} \quad X = 27$$

$$8) \quad Y = \frac{7M^3\sqrt{N}}{40W^2} \quad Y = \frac{25}{14}$$

$$9) \quad V = \frac{75T}{P} \quad V = 1050\text{cm}^3$$

$$10) \quad K = \frac{27}{2} \quad P = \frac{27G^2}{2F\sqrt{E}}$$

$$11) \quad H = \frac{27\sqrt{E}}{C^2} \quad H = \frac{27}{16} \text{ or } 1.6875 \text{ hours}$$

$$12) \quad C = \frac{3RH^3}{4\sqrt{T}} \quad C = \frac{81}{2}$$

$$13) \quad W = \frac{3C}{10\sqrt{E}} \quad W = 600 \text{ lbs}$$

$$14) \quad K = \frac{16}{27} \quad Z = \frac{16\sqrt[3]{V}X^3}{27W^2}$$

$$15) \quad L = \frac{24M\sqrt{F}}{C^2} \quad L = 48 \text{ years}$$

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$$16) \quad M = \frac{13P^2}{B\sqrt{E}} \quad M = \frac{39}{8}$$

$$17) \quad G = \frac{1600\sqrt{TR^2}}{3E} \quad G = 12 \text{ inches}$$

$$18) \quad K = 16 \quad H = \frac{16ND}{W}$$

$$19) \quad B = \frac{120T\sqrt{H}}{A^2} \quad B = 1,000$$

$$20) \quad E = \frac{42\sqrt[3]{FM^3}}{G^2\sqrt{V}} \quad E = \frac{56}{3}$$

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