

9, 10, 15, 17, 16

$$9. \quad 3y^2 = 1 - y$$

$$-3y^2$$

$$0 = 1 - y - 3y^2$$

$$a = -3 \quad b = -1 \quad c = 1$$

$$y = \frac{1 \pm \sqrt{1 - 4(-3)(1)}}{2(-3)}$$

$$y = \frac{1 \pm \sqrt{13}}{-6}$$

$$10. \quad 8x = 1 - x^2$$

$$0 = -x^2 - 8x + 1$$

$$a = -1 \quad b = -8 \quad c = 1$$

$$x = \frac{8 \pm \sqrt{64 - 4(-1)(1)}}{2(-1)}$$

$$x = \frac{8 \pm \sqrt{68}}{-2} = \frac{4\sqrt{17}}{-2}$$

$$x = \frac{8 \pm 2\sqrt{17}}{-2}$$

$$x = -4 \pm \sqrt{17}$$

$$15. \left( \frac{w^2}{2} - w = \frac{3}{4} \right) 4$$

$$2w^2 - 4w = 3$$

$$2w^2 - 4w - 3 = 0$$

$$w = \frac{4 \pm \sqrt{16 - 4(2)(-3)}}{2(2)}$$

$$w = \frac{4 \pm \sqrt{40}}{4} \begin{matrix} 4 \div 2 \\ 10 \div 2 \end{matrix} \begin{matrix} \sqrt{2} \\ \sqrt{5} \end{matrix}$$

$$w = 4 \pm 2\sqrt{\quad}$$

## Quiz Corrections

$$1. \quad \frac{9-y^2}{-9} = \frac{6}{-9}$$

$$\frac{-y^2}{-1} = \frac{-3}{-1}$$

$$\sqrt{y^2} = \sqrt{3}$$

$$y = \pm \sqrt{3}$$

$$2. \quad \sqrt{30} \cdot \sqrt{42}$$

$$\begin{array}{cc} \wedge & \wedge \\ 3 & 2 \\ 10 & 21 \\ \wedge & \wedge \\ 25 & 37 \end{array}$$

$$\sqrt{1260}$$

$$\begin{array}{cc} \wedge & \wedge \\ 30 & 42 \\ \wedge & \wedge \\ 3 & 2 \\ 10 & 21 \\ \wedge & \wedge \\ 25 & 37 \end{array}$$

$$6\sqrt{35}$$

$$3. \quad \frac{\sqrt{18}}{1} \cdot \sqrt{\frac{3}{10}} = \sqrt{\frac{54}{10}} = \sqrt{\frac{27}{5}}$$

$$\frac{3\sqrt{3}}{\sqrt{5}} \cdot \frac{\sqrt{3}}{\sqrt{5}} = \frac{3\sqrt{15}}{\sqrt{25}} = \frac{3\sqrt{15}}{5}$$

$$4. \quad \sqrt[3]{(-9)^3} = (-9)$$

$$5. \quad \sqrt{363}$$

$$\begin{array}{cc} \wedge & \wedge \\ 3 & 121 \\ \wedge & \wedge \\ 11 & 11 \end{array} = 11\sqrt{3}$$

$$6. \quad \sqrt[3]{250}$$

cube root  
not 3 times square root