nit 9 Test

lve for x

$3x^2 = 12$

lucing Radicals

$\sqrt{80}$ $\sqrt{\frac{6}{2}}$

g

e by graphing

$\frac{-b}{2a} \rightarrow$ 5 points

④ Quadratic Formula

$x = \frac{-b \pm \sqrt{b^2-4}}{2a}$

⑤ Application

Max height → Ver

Ground → Quad. fo

562 # 1-15, 18-20

$14 = 0$

$144 \quad +144$

$= \sqrt{144}$

$= \pm 12$

$\frac{968}{8}$

21

1

$9 = 19$

$9 \quad -19$

$= 0$

$\frac{}{9}$

$\sqrt{t^2} = \sqrt{0}$

$t = 0$

④ $16y^2 - 80 = 0$

$+80 \quad +80$

$\frac{\cancel{16}y^2}{\cancel{16}} = \frac{80}{16}$

$y^2 = 5$

$\sqrt{y^2} =$

$y =$

⑤ $\cancel{5}\cdot\frac{1}{\cancel{5}}a^2 = 5 \cdot 5$

$\sqrt{a^2} = \sqrt{25}$

$a = \pm 5$

⑥ $\frac{1}{3}x^2 - 7 = -4$

$+7 \quad +7$

$\cancel{3}\cdot\frac{1}{\cancel{3}}x^2 = 3 \cdot 3$

$\sqrt{x^2} = \sqrt{9}$

$x = \pm 3$

8 $\sqrt{441}$

$\boxed{21}$

9 $\sqrt{\frac{36}{64}}$

$\frac{\sqrt{36}}{\sqrt{64}} = \frac{6}{8}$

$\boxed{\frac{3}{4}}$

10 $\sqrt{\frac{99}{25}}$

$\frac{\sqrt{99}}{\sqrt{25}}$

$\boxed{\frac{3\sqrt{11}}{5}}$

$- x - 5$

$$x = \frac{-b}{2a} = \frac{1}{2} = .5$$

	work	y
	$1+1-5$	-3
	$0-0-5$	-5
	$.25-.5-5$	-5.25
	$1-1-5$	-5
2	$4-2-5$	-3

$2 = 3x$

$\boxed{3x + 2 = 0}$

$x = \frac{-b}{2a} = \frac{3}{2} = 1.5$

x	Work	y
0	0-0+2	2
1	1-3+2	0
.5	.25-.75+2	= .25
2	4-6+2	0
3	9-9+2	2

$x = 1, 2$

$4x + 1 = 0$

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

$$= \frac{4 \pm \sqrt{16 - 4 \cdot 3 \cdot 1}}{6}$$

$$= \frac{4 \pm \sqrt{4}}{6}$$

$$\frac{4 \pm 2}{6}$$

$$\frac{4+2}{6} \quad \Big| \quad \frac{4-2}{6}$$

$$1 \qquad \frac{2}{6} = \frac{1}{3}$$

$$x = 1, \frac{1}{3}$$

$+x+6=0$

$$x=\frac{-b\pm\sqrt{b^2-4ac}}{2a}$$

$$x=\frac{-1\pm\sqrt{1-4(-2)6}}{-4}$$

$$x=\frac{-1\pm\sqrt{49}}{-4}$$

$$x=\frac{-1\pm 7}{-4}$$

$$x=\frac{-1+7}{-4} \qquad \frac{-1-7}{-4}$$

$$\frac{6}{-4} \qquad \frac{-8}{-4}$$

$$-1.5 \qquad 2$$

vertex $= \frac{-b}{2a}$

Max height

Quad. Formula

- use pos. answers

HMWK

565 #1-12,