Algebra I

12-1

(Day 2)

Quadratic Equations with Perfect Squares

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1) $\sqrt{(y-6)^2} = \sqrt{18}$

$|y-6| = \sqrt{9 \cdot 2}$

$y-6 = \pm 3\sqrt{2}$

$y-6+6 = 6 \pm 3\sqrt{2}$

$\{6 \pm 3\sqrt{2}\}$

b) $\{10.2, 1.8\}$

$2 \boxed{\sqrt{}} \boxed{x} \boxed{3} \boxed{+/-} \boxed{+} 6$

31) $\left(\frac{1}{5}r^2 - 2 = \frac{5}{6}\right) 30$

$6r^2 - 60 = 25$

$6r^2 - 60 + 60 = 25 + 60$

$\dfrac{6r^2}{6} = \dfrac{85}{6}$

$\sqrt{r^2} = \sqrt{\dfrac{85}{6}}$

$|r| = \dfrac{\sqrt{85}}{\sqrt{6}} \cdot \dfrac{\sqrt{6}}{\sqrt{6}}$

$\left\{ \pm \dfrac{\sqrt{510}}{6} \right\}$ $|r| = \dfrac{\sqrt{510}}{6}$

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39) $\sqrt{\left(z - \frac{3}{5}\right)^2} = \sqrt{\frac{7}{16}}$

$\left| z - \frac{3}{5} \right| = \frac{\sqrt{7}}{4}$

$z - \frac{3}{5} = \pm \frac{\sqrt{7}}{4}$

$z = \frac{3}{5} \pm \frac{\sqrt{7}}{4}$

$\left\{ \frac{3}{5} \pm \frac{\sqrt{7}}{4} \right\}$

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2-24 even

30-38 even

do part b when
necessary.