Solving WKST 1

Date_____ Period____

Solve each equation.

1) $2^{2x} = 64$

2) $5^{2-3k} = \frac{1}{25}$

3) $4^{-2x} = \frac{1}{16}$

4) $5^{-2k+1} = 5^{k+2}$

5) $625^{2n+2} = 25^{-n}$

6) $4^{3n} = \frac{1}{32}$

7) $2^{r} \cdot 2^{r+3} = 2^{r}$

8) $\left(\frac{1}{25}\right)^{-p} = 625^{3p}$

9) $27^{-3x+1} = 9^{-x}$

10) $4^{-2x-3} = 1$

Algebra 2 Name_____ ID: 1

Solving WKST 1

Date_____ Period____

Solve each equation.

1) $2^{2x} = 64$

$\{3\}$

2) $5^{2-3k} = \frac{1}{25}$

$\left\{\frac{4}{3}\right\}$

3) $4^{-2x} = \frac{1}{16}$

$\{1\}$

4) $5^{-2k+1} = 5^{k+2}$

$\left\{-\frac{1}{3}\right\}$

5) $625^{2n+2} = 25^{-n}$

$\left\{-\frac{4}{5}\right\}$

6) $4^{3n} = \frac{1}{32}$

$\left\{-\frac{5}{6}\right\}$

7) $2^r \cdot 2^{r+3} = 2^r$

$\{-3\}$

8) $\left(\frac{1}{25}\right)^{-p} = 625^{3p}$

$\{0\}$

9) $27^{-3x+1} = 9^{-x}$

$\left\{\frac{3}{7}\right\}$

10) $4^{-2x-3} = 1$

$\left\{-\frac{3}{2}\right\}$