Assignment
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Solve each equation.

1) 
$$36^x = \left(\frac{1}{6}\right)^{-x}$$

$$2) \ 216^a = 36^{2a-2}$$

3) 
$$27^{2k} = 3^5$$

4) 
$$2^{-p+1} = 1$$

5) 
$$3^{3x-2} = 81$$

6) 
$$4^{3n} = 4^2$$

7) 
$$3^{-2m} = 3^{3m+2}$$

8) 
$$25^{3r} = 125$$

9) 
$$16^{3x} = 64$$

$$10) \left(\frac{1}{8}\right)^{2x} = 4^{-3x}$$

## Answers to Assignment (ID: 1)

1) {0}

2) {4}

 $3) \left\{ \frac{5}{6} \right\}$ 

4) {1}

5) {2}

 $6) \left\{ \frac{2}{3} \right\}$ 

 $7) \left\{-\frac{2}{5}\right\}$ 

 $8) \left\{ \frac{1}{2} \right\}$ 

9)  $\left\{\frac{1}{2}\right\}$ 

10) { All real numbers. }