

**Student:** \_\_\_\_\_  
**Date:** \_\_\_\_\_  
**Time:** \_\_\_\_\_

**Instructor:** Fred Khoury  
**Course:** Math 2312-1000 Precalculus (Fall - 2015)  
**Book:** Lial: College Algebra and Trigonometry, 4e

**Assignment:** Quiz Sec 1.8

1. Solve the equation.

$$4^{(2-3x)} = \frac{1}{256}$$

- ☐ A.  $\left\{\frac{1}{64}\right\}$   
☐ B.  $\{-2\}$   
☐ C.  $\{2\}$   
☐ D.  $\{-256\}$

2. Solve the equation. If necessary, round to the nearest thousandth.

$$3^{4x} = 4^{x+1}$$

- ☐ A.  $\{-4.819\}$   
☐ B.  $\{1.262\}$   
☐ C.  $\{0.461\}$   
☐ D.  $\{2.262\}$

3. Express the solution in exact form.

$$\log(x-3) = 1 - \log x$$

- ☐ A.  $\{-5, 2\}$   
☐ B.  $\{5\}$   
☐ C.  $\{-2, 5\}$   
☐ D.  $\{-5\}$

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4. Express the solution in exact form.

$$\ln(6x - 1) + \ln(x - 1) = \ln 1$$

- ☐ A.  $\emptyset$
- ☐ B.  $\left\{\frac{7}{6}\right\}$
- ☐ C.  $\left\{0, \frac{7}{6}\right\}$
- ☐ D.  $\left\{1, \frac{1}{6}\right\}$

5. Solve the equation.

$$\log_5 x = \sqrt{\log_5 x}$$

- ☐ A.  $\{0, 1\}$
- ☐ B.  $\{5\}$
- ☐ C.  $\{1, 5\}$
- ☐ D.  $\{0, 5\}$

6. Solve the equation.

$$\log_5 x^2 = (\log_5 x)^2$$

- ☐ A.  $\{25\}$
- ☐ B.  $\{1, 5\}$
- ☐ C.  $\{0, 5\}$
- ☐ D.  $\{1, 25\}$

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7. Solve the equation.

$$\log_4(\log_4 x) = 1$$

☐ A.  $\{256\}$

☐ B.  $\{16\}$

☐ C.  $\{4\}$

☐ D.  $\{8\}$

8. Solve the equation.

$$\ln x - \ln(x - 2) = \ln 8$$

☐ A.  $\left\{ \frac{2 \ln 8}{\ln 8 - 1} \right\}$

☐ B.  $\emptyset$

☐ C.  $\{6\}$

☐ D.  $\left\{ \frac{16}{7} \right\}$