

Answers to Worksheet 32 - Lesson 82

$$1) \frac{\ln 69}{\ln 5} + 8$$

$$2) -\frac{\ln 60}{3 \ln 12}$$

$$3) \frac{1}{4} \cdot \ln \frac{85}{7}$$

$$4) \frac{\ln \frac{85}{7}}{\ln 4} + 8$$

$$5) \frac{1}{6} \left(\frac{\ln \frac{92}{9}}{\ln 6} + 4 \right)$$

$$6) \frac{1}{9} \left(-\frac{\ln \frac{5}{2}}{\ln 20} - 3 \right)$$

$$7) x = \frac{\ln 4 + 2 \ln 6}{2 \ln 4 - 3 \ln 6}$$

$$8) x = \frac{2 \ln 5 + 3 \ln 10}{\ln 5 - 4 \ln 10}$$

$$9) \left\{ \frac{4}{7} \right\}$$

$$10) \left\{ -\frac{1}{3} \right\}$$

$$11) \left\{ \frac{4}{3}, -\frac{4}{3} \right\}$$

$$12) \{-5\}$$

13) No solution.

$$14) \left\{ \frac{83}{50} \right\}$$