

5.6 Solving Exponential Equations Practice

Directions: Solve each equation. Check for extraneous solutions.

1. $12^{n-3} = 60$

$n \approx 4.648$

2. $4^{8n-2} = 84$

$n \approx 0.650$

3. $4 \cdot 10^k = 60$

$k \approx 1.176$

4. $13^{c-8} - 9 = 17$

$c \approx 9.270$

$$5. 6(4^m) - 14 = 88$$

$$m \approx 2.044$$

$$6. 8^{6-4x} + 6 = 22$$

$$x \approx 1.167$$

$$7. 9 \cdot 12^{r+4} - 8 = 127$$

$$r \approx -2.910$$

$$8. -5 \cdot 4^{6x} + 5 = -30$$

$$x \approx 0.234$$