

\* 19. TYP0  $36^{x-5}$

GO

Topic: Solving exponential equations

Solve for x.

15.  $4^{(2x-7)} = 64$

$x = 5$

16.  $5^x = \frac{1}{125}$

$x = -3$

17.  $3^{(2x+8)} = 729$

$x = -1$

18.  $(\frac{1}{2})^x = 128$

$x = -7$

19.  $36^{(x-5)} = 216^{(x-3)}$

$x = -1$

20.  $(\frac{2}{3})^x = \frac{16}{81}$

$x = 4$

21.  $3^{-x} = 27$

$x = -3$

22.  $(\frac{3}{4})^x = \frac{16}{9}$

$x = -2$

23.  $125^{(3x-4)} = 625^{(x+1)}$

$x = \frac{16}{5}$