

Logarithmic Equation

MS3

Solve each logarithmic equation.

1) $\log_3 (x-12) = \log_3 5 + 2 \log_3 3$

x =

2) $\log_2 (x+4) + 3 \log_2 2 = \log_2 (6x+4)$

x =

3) $\log_2 (5+x) + \log_2 2 = 2 \log_7 5$

x =

5) $\log_3 12 = \log_3 (x+6) + 2 \log_2 6$

x =

7) $\log_6 x - 2 \log_6 2 = \log_2 12$

x =

9) $\log_4 (x+4) + \log_4 2 = \log_4 (3x-7)$

x =

10) $3 \log_8 x - \log_8 7 = \log_8 49$

x =

PREVIEW

Access the largest collection of
worksheets for just **\$19.95** per year!

Members, please
log in to
download this
worksheet.

Log in

Not a member?
Please sign up to
gain complete
access.

Sign up

www.mathworksheets4kids.com

Logarithmic Equation

MS3

Solve each logarithmic equation.

1) $\log_3 (x-12) = \log_3 5 + 2 \log_3 3$

x = **57**

2) $\log_2 (x+4) + 3 \log_2 2 = \log_2 (6x+4)$

x = **-14**

3) $\log_2 (5+x) + \log_2 2 = 2 \log_7 5$

x = **-1**

5) $\log_3 12 = \log_3 (x+1) + 2 \log_2 6$

x = **44**

7) $\log_6 x - 2 \log_6 2 = \log_2 12$

x = **64**

9) $\log_4 (x+4) + \log_4 2 = \log_4 (3x-7)$

x = **15**

10) $3 \log_8 x - \log_8 7 = \log_8 49$

x = **7**

PREVIEWAccess the largest collection of
worksheets for just **\$19.95** per year!Members, please
log in to
download this
worksheet.**Log in**Not a member?
Please sign up to
gain complete
access.**Sign up**www.mathworksheets4kids.com