

LEMBAR KERJA PESERTA DIDIK

LKPD MATEMATIKA

LOGARITMA



1²3

SEKOLAH	: SMKN 1 KARAWANG
MATA PELAJARAN	: MATEMATIKA
KELAS/SEMESTER	: X/GANJIL
MATERI POKOK	: LOGARITMA
ALOKASI WAKTU	: 45 MENIT



HARI/TANGGAL :
NAMA :
KELAS :



KEGIATAN 2

1. Susunlah bentuk logaritma dengan bentuk eksponen agar berpasangan dengan tepat!

a. ${}^3\log 27 =$

b. ${}^2\log 4 =$

c. ${}^2\log 1 =$

2

3

4

0

1

2

2. Perhatikan pernyataan dibawah ini! Berikan tanda centang () pada jawaban yang benar!

☐ Nilai $\log 100 = 2$

☐ $\left(\frac{1}{2}\right)^3 = \frac{1}{8} \rightarrow {}^{\frac{1}{2}}\log \frac{1}{8} = 3$

☐ ${}^2\log 2 = 1$



KEGIATAN 3

1. ${}^2\log 32 = {}^2\log 2^5 = \dots\dots$

2. ${}^3\log 81 = {}^3\log 3^{\dots\dots} = \dots\dots$

3. ${}^2\log 64 = {}^2\log 2^{\dots\dots} = \dots\dots$

KEGIATAN 4

- ${}^3\log 27 + {}^3\log 6 - {}^3\log 2 = {}^3\log \left(\frac{27 \cdot 6}{2}\right) = {}^3\log \dots = {}^3\log 3 \dots = \dots$
- ${}^3\log \frac{1}{64} = {}^2\log (\dots)^{-1} = {}^2\log (2 \dots)^{-1} = {}^2\log 2 \dots = \dots$
- ${}^{\sqrt{5}}\log 625 = {}^{5^{-1}}\log 5 \dots = \frac{\dots}{-1} \cdot {}^5\log 5 = \dots$

KEGIATAN 5

- ${}^5\log 4 = \dots$
- $$\begin{aligned} {}^3\log 16 \cdot {}^4\log 3 &= {}^3\log 4^2 \cdot {}^4\log 3 \\ &= 2 \cdot {}^3\log \dots \cdot {}^4\log \dots \\ &= \dots \cdot {}^3\log 3 \\ &= \dots \end{aligned}$$
- $$\begin{aligned} {}^5\log 27 \cdot {}^2\log 125 \cdot {}^3\log 4 &= {}^5\log 3 \dots \cdot {}^2\log 5 \dots \cdot {}^3\log 2 \dots \\ &= 3 \cdot {}^5\log \dots \cdot 3 \cdot {}^2\log \dots \cdot 2 \cdot {}^3\log \dots \\ &= 3 \cdot 3 \cdot 2 \cdot {}^5\log \dots \cdot {}^3\log \dots \cdot {}^2\log \dots \\ &= \dots \cdot {}^5\log 5 \\ &= \dots \cdot 1 \\ &= \dots \end{aligned}$$