

LEMBAR KERJA PESERTA DIDIK

LKPD MATEMATIKA

LOGARITMA

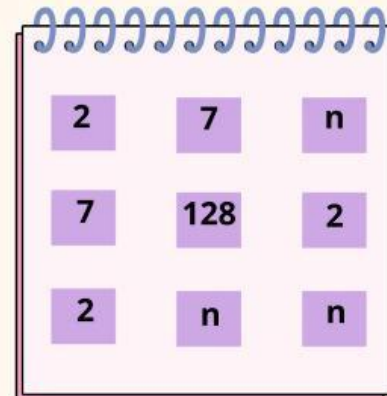
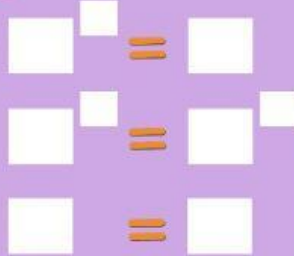
SEKOLAH	: SMKN 1 KARAWANG
MATA PELAJARAN	: MATEMATIKA
KELAS/SEMESTER	: X/GANJIL
MATERI POKOK	: LOGARITMA
ALOKASI WAKTU	: 45 MENIT

HARI/TANGGAL :
NAMA :
KELAS :

KEGIATAN 1

Lengkapi penyelesaian berikut ini dengan cara drag and drop!

$${}^2\log 128 = n \longrightarrow$$



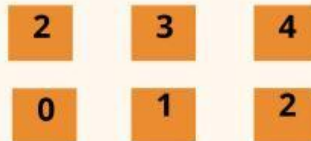
KEGIATAN 2

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

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

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

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



2. 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

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

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

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

KEGIATAN 4

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

$$2. {}^3 \log \frac{1}{64} + {}^2 \log (\dots)^{-1} = {}^2 \log (2^{\dots})^{-1} = {}^2 \log 2^{\dots} = \dots$$

$$3. {}^{\sqrt{5}} \log 625 = {}^{5^{-1}} \log 5^{\dots} = \frac{\dots}{-1} \cdot {}^5 \log 5 = \dots$$

KEGIATAN 5

$$1. {}^5 \log 4 = \dots$$

$$\begin{aligned} 2. {}^3 \log 16 \cdot {}^4 \log 3 &= {}^3 \log 4^2 \cdot {}^4 \log 3 \\ &= 2 \cdot {}^3 \log \dots \cdot {}^4 \log \dots \\ &= \dots \cdot {}^3 \log 3 \\ &= \dots \end{aligned}$$

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