

URGANCH TUMANIDAGI 11-SON UMUMIY
O`RTA TA`LIM MAKTABINING
MATEMATIKA FIZIKA FANI
O`QITUVCHISI
ZULXUMOR EGAMBERDIYEVANING
MATEMATIKA FANIDAN BIR SOATLIK
DARS ISHLANMASI

MAVZU: ALGEBRAIK KASRLAR USTIDA
BIRGALIKDA BAJARILADIGAN AMALLAR

Urganch 2006 yil

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MAQSAD: 1) Ta'limiy maqsad:

Algebraik kasrlar ustida bajariladigan amallarni umumlashtirib yangi mavzuni mustahkamlash.

a) Tarbiyaviy maqsad: o'quvchilarni milliy istiqlol g'oyalari asosida tarbiyalash, milliy qadriyatlarni ular ongiga singdirib borish.

b) rivojlantiruvchi maqsad:

o'quvchilarni dunyoqarashini, fikrlash qobiliyatlarini kengaytirish, ularni matematika yo'li bilan ongini shakllantirish.

I. Darsni borishi:

O'quvchilar bilan salomlashgach, davomatni aniqlayman. Uy vazifalarini so'rab, o'quvchilarni baholayman. O'tilgan mavzuni mustahkamlash uchun mustaqil ish beraman.

O'tilgan mavzu: Algebraik kasrlarni ko'paytirish va bo'lishga doir mashqlar yechish.

Mustaqil ish.

$$1. \frac{a^2 b}{c} : \frac{a^4}{c^2} =$$

$$2. \frac{8m}{9n} : \left(-\frac{16k}{27d} \right) =$$

$$3. \frac{3+x}{x+y} : \frac{x^2 - y^2}{3+x}$$

Mustaqil ishni 5 minut ichida tekshirib o`quvchilarni baholayman.

II. Yangi mavzu bayoni.

Mavzu: Algebraik kasrlar ustida birgalikda bajariladigan amallar.

Algebraik kasrlar ustidagi to`rt amalni bajarishni o`rgandik. Bugungi darsimizda algebraik kasrlar ustida birgalikda bajariladigan amallarni bajaramiz.

$$1. \frac{a^2 - ab}{a^2 + b^2} \cdot \left(\frac{a^2}{a-b} + \frac{b^2}{a-b} \right) = a;$$

$$\frac{a^2}{a-b} + \frac{b^2}{a-b} = \frac{a^2 + b^2}{a-b}$$

2.

$$\left(a + \frac{a}{b} \right) \left(a - \frac{a}{b} \right) = \frac{ab + a}{b} \cdot \frac{ab - a}{b} = \frac{a(b+1)}{b} \cdot \frac{a(b-1)}{b} = + \frac{a^2(b+1)(b-1)}{b^2} = \frac{a^2(b^2-1)}{b^2}$$

$$\text{№ 667 } 1) \left(\frac{a}{2} - \frac{a}{3} \right) \cdot \frac{1}{a^2} = \frac{1}{6a}$$

$$2) \frac{a}{2} - \frac{a}{3} = \frac{3a}{6} - \frac{2a}{6} = \frac{3a - 2a}{6} = \frac{a}{6}$$

$$3) \frac{a}{6} \cdot \frac{1}{a^2} = \frac{1}{6a}$$

$$4) \frac{a+b}{a-b} \cdot \left(\frac{a}{5} + \frac{b}{5} \right) = \frac{a+b}{a-b} \cdot \frac{a+b}{5} = \frac{(a+b)}{5(a-b)}$$

$$5) 1 : \left(1 \frac{1}{a} \right) = 1 : \frac{a+1}{a} = 1 \cdot \frac{a}{a+1} = \frac{a}{a+1};$$

III. Yangi mavzuni mustahkamlash .

Yangi mavzuni mustahkamlash uchun tarqatma materiallardan foydanaman.

№ 1

Qulay usul bilan hisoblang

$$99^2 =$$

№ 2

Qisqa ko`paytirish formulasidan foydalanib hisoblang.

$$51 \cdot 49 =$$

№3

Kasrni qisqartiring.

$$\frac{5^2 - a^2}{25 + 10a + a^2} =$$

№4

Hisoblang. $a=5$

$$(25^2 - a^2) =$$

№ 5

Kasrni qisqartiring.

$$\frac{a^2 - 12a + 36}{(a - 6)^2} =$$

Dars jarayonida test matiriallaridan foydalanaman. Testlarni axborotnomalardan olaman.

1. Ifodani soddalashtiring.

$$\frac{2a^2 + 4ab - 6b^2}{a^2 + 5ab + 6b^2} =$$

$$\text{A) } \frac{2(a - b)}{a + 2b}; \quad \text{B) } \frac{a - b}{a + 2b}; \quad \text{C) } \frac{2a - b}{a + 2b};$$

$$\text{D) } \frac{a + 2b}{2(a - b)}; \quad \text{E) } \frac{2(a - b)}{a + b}$$

2. Hisoblang.

$$\frac{1}{1 \cdot 2} + \frac{1}{2 \cdot 3} + \frac{1}{3 \cdot 4} + \dots + \frac{1}{999 \cdot 1000} =$$

$$\text{A) } 0,750; \quad \text{B) } 1,125; \quad \text{C) } 0,998; \quad \text{D) } 1,450; \quad \text{E) } 0,999$$

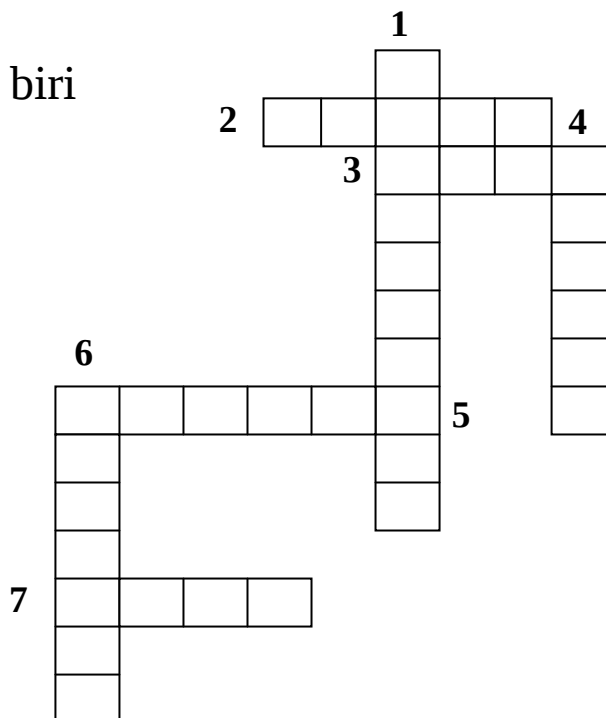
3. Hisoblang:

$$\frac{5 \cdot 2^{32} - 4 \cdot 2^{30}}{4^{16}} =$$

A) 4, B) 2, C) 5, D) 16, E) $\frac{1}{4}$

Krassvord topshiriqlari.

1. Algevara fani asoschisi
2. Kasr qaysi amal belgisi
3. Ma`mun akademiyasi qayerda joylashgan
4. Algebraik amallardan biri
5. O`quv maskani
6. Buyuk allomalardan biri
7. So`rov savoli



Uyga vazifa № 668-669

