

### Cov Hom Phiaj Kawm Tseem Ceeb rau Qib No

#### Cov Naj Npawb Rational Exponents thiab Cov Naj Npawb Complex

Cov tub/ntxhais kawm ntawv yuav nthuav lawv txoj kev txawj ntse txog ntawm cov naj npawb system los ntxiv rau cov complex naj npawb uas yog ob peb tug naj npawb uake thiab kom paub tias cov naj npawb uas tsis tuaj yeem faib tau nruab nrab (irrational) thiab cov naj npawb complex systems yog sib txheeb rau cov naj npawb integer.

“Kuv yuav hloov tau nyob rau radical form thiab rational exponent, thiab kuv muab tus naj npawb power coj los sib khoov thiab sib faib nrog rau cov rational exponent.” (xws li  $\sqrt[3]{8} = 8^{\frac{1}{3}}$ )

“Kuv ntxiv, rho, thiab khoov tau cov naj npawb polynomial.”  
  
(Polynomials yog cov naj npawb uas muaj tus tsiaj ntawv sawv cev tau tias muaj lub zog ntau licas, xws li  $3x^2 + 4x - 1$ .)

“Kuv ntxiv, rho, thiab khoov tau cov naj npawb complex.”  
  
(Cov naj npawb Complex yog sau raws li  $a + bi$  uas  $a$  thiab  $b$  yog cov naj npawb tseem thiab  $i$  yog tus naj npawb uas kwv yees rau unit)

*Qhob ua piv txiv:*

Find some possible expressions in the form of  $(a + bi) + (a + bi)$  and  $(a + bi) - (a + bi)$  that would result in  $3 - 4i$ .

Polynomials	Complex Numbers
$(x - 5)(2x + 1)$	$(-5 + i)(1 + 2i)$
Piav qhia cov uas zoo sib thooj thiab cov uas txawv nyob hauv cov them rau kev sib khoov ntawm txhua kab lej expression.	

#### Cov kab Quadratic Functions uas kos rau ntawv daim graph

Cov tub/ntxhais kawm ntawv yuav kawm kos (graph) cov kab quadratic functions, siv lawv los ua qauv piv txwv rau tej yam tshwm sim muaj tiag, thiab tawm cov qhob leb quadratic equations. (Ib qhov quadratic function yog sau raws li no  $f(x) = ax^2 + bx + c$  uas tus graph yog ib txoj kab parabola)

“Kuv piav qhia tau qhov txawv nyob rau ntawm txoj kab linear, exponential, thiab quadratic equations.”

“Kuv paub tau qhov txawv ntawm ntau hom quadratic equations thiab muab lawv sib hloov tau.”

“Kuv qhia tau cov yam ntxwv tseem ceeb txog ntawm ib qho parabola thiab siv cov no los ua qauv piv txwv rau ntawm tej yam txog quadratic thiab daws cov teebmeem.”

*Qhob ua piv txiv:*

Ib tug qav tab tom yuav dhia hla ib tug kwj deg. Txoj kev uas yuav dhia muab piv txwv tau los ntawm qhob leb equation  $h(x) = -x^2 + 4x + 1$ , uas  $h(x)$  yog qhov siab ntawm tus qav saum cov dej thiab  $x$  yog tus naj npawb ntawm cov second txij thaum tus qav dhia lawm. Muaj ib tug yoov ya ncig dhau saum cov nplaim dej qhov siab yog 5 feet. Yog li ntawd tus qav puas yuav txhom tau tus yoov, los ntawm qhob leb equation txog ntawm qhov tus qav dhia?

#### Leb Geometry

Cov tub/ntxhais kawm ntawv yuav los ua cov kws txawj paub zoo txog kev zoo sib thooj, kawm los qhia tau qhov tseeb ntawm cov geometry, thiab kawm txog cov voj voog geometry.

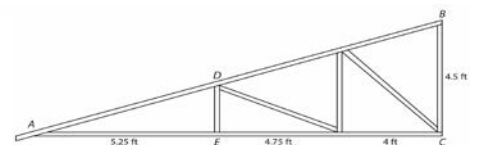
“Kuv qhia tau lossis tsis tau tias yog ib lub triangle zoo xws ib lub (muaj cov ces kaum zoo ib yam thiab cov ntug ntev sib luag ib yam).”

“Kuv nrhiav tau qhov sine thiab cosine ntawm cov ces kaum hauv cov right triangles.”

“Kuv siv tau cov properties ntawm cov voj voog los ntsuas tau cov ces kaum thiab cov ntug thaiv seb yog licas.”

*Qhob ua piv txiv:*

Mono truss yog ib hom qhab tse siv los txhawb pab uas yog ua ib lub right triangle li daim duab kos no. Cov kws xab vaj tse feem ntau siv cov qhab tse no los ua saum lub ru tsev rau tej yam me me li lub nkas la thiab cov menyuum tsev rau khoom. Cov qhab tse ntsug no ua tau cov ces kaum 90 degree nrog rau cov qhab tav toj thiaj yuav ua tau kom nyob ruaj khov. Saib daim duab kos ua cov qhab tse pab raws li hauv qab no. Ua li  $\triangle ABC$  puas zoo ib yam li  $\triangle ADE$ ? Piav seb yog vim licas. Puas yuav paub tau seb txoj kab DE ntev licas raws li uas pom ntawm daim duab? Yog tias tau, laij seb tus ceg ntawd ntev licas.



## Cov Cwj Pwm Xav Kom Coj Nyob rau Hauv Chav Kawm Leb

Cov Tub/Ntxhais Kawm Yuav...

- Xav txog cov cuab yeej uas muaj los pab lawv daws cov teebmeem thiab nkag siab tob ntxiv (xws li cov cuab yeej siv tes thiab technology).
- Nrhiav cov qauv sib raws thiab kev sib txuas.
- Piav qhia txog lawv kev xav thiab lawv qhov kev los daws ib qho teebmeem.
- Twv seb yuav zoo lidas tom ntej thiab kwv yees.
- Txiav txim seb qhov lus teb puas tsim nyog.
- Teev kom muaj laj thawj rau cov lus kawg.
- Siv cov tswv yim los sib txuas lus kom meej meej thiab sau ntawv, siv cov lus ua lej thaum tsim nyog.
- Siv kev ua leb los daws cov teebmeem nyob hauv lub neej li txhua hnuv no.

## Kuv Yuav Txhawb Pab Tau Kuv Tus Tub/Ntxhais Kawm Ntawv Tau Lidas Nyob Rau Hoob Kawm No?



### Mus rau hauv Google Classroom Tsis Tu Ncua (yog tau)

- ⇒ Saib rau ntawm qhov Stream rau kev tshaj tawm txhua hnuv thiab kev qhia sijhawm rau txhua lub asthiv.
- ⇒ Saib rau qhov Classwork rau kev qhia cov ntaub ntawv ua hauv chav thiab txhawb pab.



### Txhawb Ntau Lub Tswv Yim thiab Cov Sawv Cev ntawm qhov Teebmeem

- ⇒ Nug kom koj tus tub/ntxhais kawm ntawv siv cov hauv kev sib txawv los daws qhov teebmeem.
- ⇒ Txhawb kom siv cov kev sawv cev sib txawv (xws li cov cim, cov lo lus, lossis cov duab/cov uas pom), thiab kom lawv muab los sib txuas nrog cov sawv cev.



### Nug Cov Lus Nug & Txhawb Koj Tus Tub/Ntxhais Kawm Ntawv Kom Nug COv Lus Nug

- ⇒ Thaum uas koj tus tub/ntxhais kawm ntawv tau kev tws lawm, tsis txhob cia li qhia lawv qhov lus teb uas raug ncaj qha. Nug cov lus nug li:
  - “Qhov lus nug ntawm qhov teebmeem/qhov haujlwm yog dabtsi?”
  - “Koj nkag siab/paub txog dabtsi los ntawm qhov haujlwm?”
  - “Koj paub tau lidas?” Mloog thaum koj tus tub/ntxhais kawm ntawv piav qhia lawv qov kev ua lej tias vim lidas thiab nug “Koj qhov lus teb puas muaj tseeb?” raws li cov ntsiab lus ntawm qhov teebmeem lossis kev ua haujlwm .
- ⇒ Txhawb koj tus tub/ntxhais kawm ntawv kom sau cov lus nug cia nqa tuaj rau lawv tus xibfwb lossis tus khub rau hnuv tom ntej.



### Saib Kev Yuav Kev Kom Muaj Nqis

- ⇒ Cov tub/ntxhais kawm ntawv tab tom kawm thaum lawv ua yuam kev; tsim kom ib puag ncig uas koj tus tub/ntxhais kawm ntawv tsis txhob txaj muag ua yuam kev thiab kawm los ntawm qhov nws yuam kev.



### Txaus Siab Rau Kev Siv Zog Tshaj Cov Lus Teb Zoo thiab Ua Kom Ceev

- ⇒ Ua kev zoo siab rau koj tus tub/ntxhais kawm qhov nws rau siab tshaj plaws, tsis hais txawm nws qhov lus teb yuav yog lossis tsis yog.
- ⇒ Thaum koj tus tub/ntxhais kawm kev taws lawm, qhia kom lawv nco tia skev kawm yeej tsis yooj yim thiab yog lawv rau siab ntso xyaum txuas ntxiv mus thiab mob siab ua, lawv yuav tsum ua tau zoo dua qub.

Xav paub ntau ntxiv mus saib tau ntawm [scusd.edu/math](https://scusd.edu/math) lossis tiv toj tau [Mikila-Fetzer@scusd.edu](mailto:Mikila-Fetzer@scusd.edu), tus Director ntawm PL, Science, EdTech, PE, & Mathematics

SCUSD Kev Sib Txig & Tus Txheej Txheem Qhia Siv: Txhua tus tub/ntxhais kawm ntawv puav leej tau txaus hwo tsam sib luag los kawm kom tiaov nrog rau tus naj npawb uas siab tshaj tom qab kawm tiaov los ntawm cov kev xaiv dav tshaj plaws.

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