1) Exponents and roots

A) $\frac{3^{x+1}}{3} =$

B) $(3^2)^x = 27 \quad x=$

C) $(2^x)^3 = 8\sqrt{2} \quad x=$

D) $\frac{36}{6^{x-2}} =$

E) $x^{3/2} = 2\sqrt{2}$

$x=$

F) $(xy)^3(xy)^{-3} =$

1) Exponents and roots (cont)

G) $\sqrt{-1-b} = -2a$

Which of the following statements could be true?

I. $b > 0$
II. $b = 0$
III. $b < 0$

H) the arithmetic mean of $10, \sqrt{x}$, and -1 is 7. What is $\frac{x}{16}$?

1) (even more) Exponents and roots

I) $\sqrt{x-8} = \sqrt{x} - 2$ $x=?$

J) if $a>0$ and $a^{\frac{b+3}{4}} = 8$ then $a^{\frac{b+3}{3}} = ?$

K) $7^{10-x} = 49$ $x-10=?$

1) (Wow! still more) Exponents and roots

L) $\left(q^{x/3}\right)^3 = \frac{1}{q}$ what is $-3x = ?$

M) if $f(x) = x^{-2}$, then when $x = 3$, $(f(x))^{-1} = ?$

2) simplifying roots

A) $\sqrt{72} =$

B) $\sqrt{96} =$

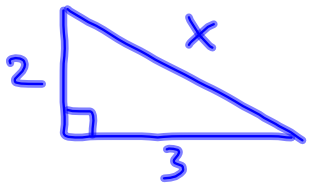
C) $\sqrt{56} =$

D) $\sqrt{8} =$

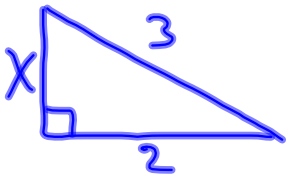
E) $\sqrt[3]{54} =$

F) $\sqrt[4]{32} =$

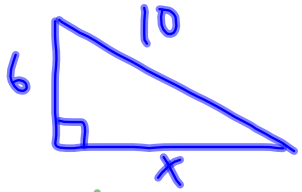
3) Right Triangles

A) 

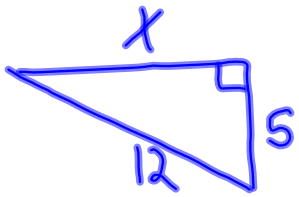
x=

C) 

x=

B) 

x=

D) 

x=

4) functions

A) $f(x)=3x^2+2x-6$

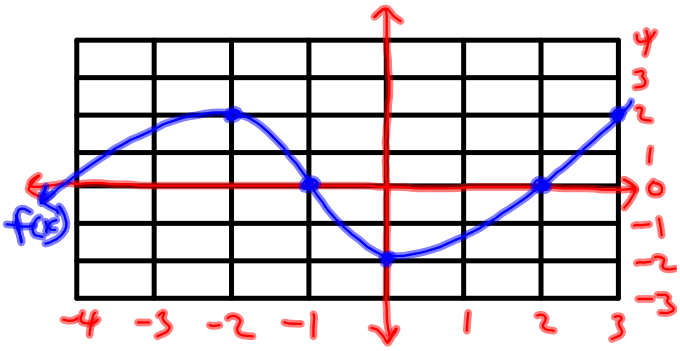
$f(2)=$ $f(-2)=$

B) $f(x)=x/(2+x^2)$

$f(2)=$ $f(-2)=$

5) More Functions

A) for any a>b, on what intervals must f(a)>f(b)?



B) f(2)=

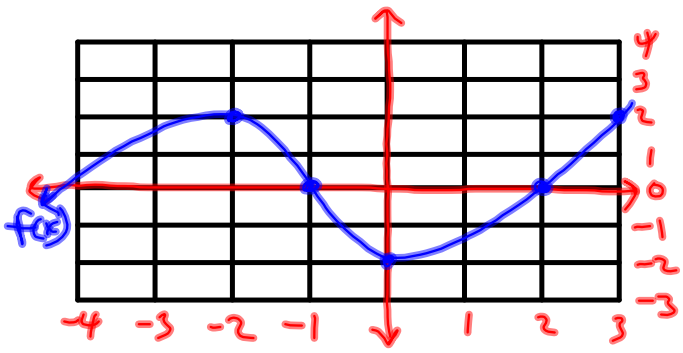
C) f(-2)=

D) f(0) =

E) f(x)=0 x=

5F) same graph for f(x)

if g(x) = f(2x+1) find g(1)



6) Factoring

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

b) $(16 - x^2) =$

c) $(y^2 - 49) =$

d) $(4x^2 - 9y^2) =$

e) $(x^2 + 4y^2) =$

f) $(x^2 + 7x + 10) =$

g) $(x^2 - 9x + 18) =$

h) $(x^2 - x - 12) =$

Jul 17-2:52 PM