October 25, 2017

#1) $f = \{(6,4), (2,-7), (-3,5), (4,6), (7,3)\}$

$D = \{6, 2, -3, 4, 7\}$

$R = \{4, -7, 5, 6, 3\}$

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#2) $T = \{(-6,-4), (-4,-4), (1,-4), (2,5)\}$

Yes! $D: \{-6, -4, 1, 2\}$ no repeats

D	R
-6	-4
-4	
1	
2	5

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D	R
-6	8
5	7
2	
5	

$(5, 7)$

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Addition: $x^3 + x^2$ unlike terms.

multiplication: $x^3 \cdot x^2 = x^5$

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Law of Exponents

① Product Rule

$x^3 \cdot x^2 = x^{3+2=5} = x^5$

② Power Rule

$(x^3)^2 = x^{3 \cdot 2 = 6} = x^6$

③ Quotient Rule

$\frac{x^3}{x^2} = x^{3-2=1} = x$

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Quotient Rule

① $\frac{x^3}{x^2} = \frac{x \cdot x \cdot x}{x \cdot x} = x$

② $\frac{x^2}{x^3} = \frac{x \cdot x \cdot 1}{x \cdot x \cdot x} = \boxed{\frac{1}{x}}$ using the meaning of Exponents

$\frac{x^2}{x^3} = x^{2-3=-1} = \boxed{x^{-1}}$

$\frac{x^4}{x^9} = x^{4-9=-5} = x^{-5} = \frac{1}{x^5}$

a.) $\frac{2^6}{2^4} = 2^{6-4=2} = 2^2 = \boxed{4}$

b.) $\frac{2^4}{2^6} = 2^{4-6=-2} = 2^{-2} = \frac{1}{2^2} = \boxed{\frac{1}{4}}$

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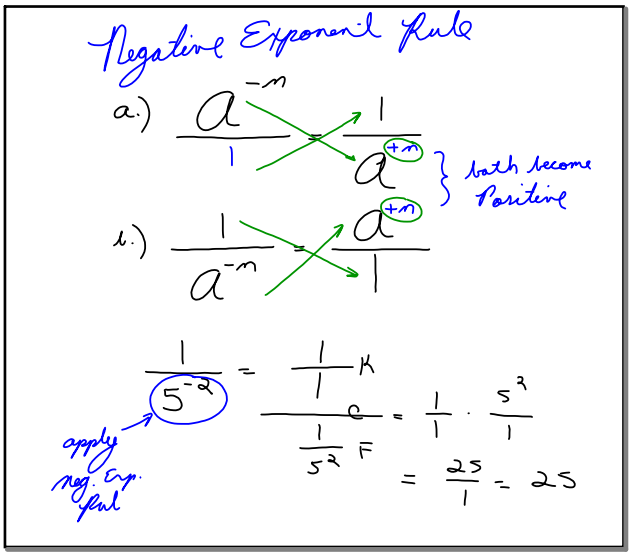

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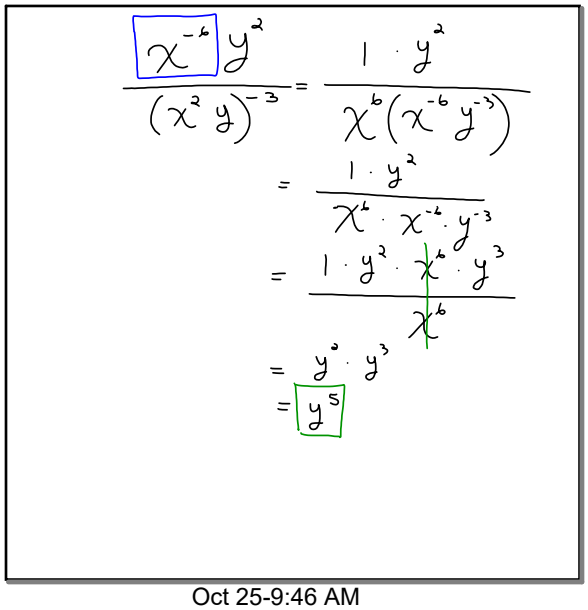

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