

Questions over homework so far?  
 pg 567 31, 29, 5

②9 CALL ME TOMORROW  $\begin{bmatrix} 1 & -1 & 0 \\ 1 & 0 & -1 \\ -6 & 2 & 3 \end{bmatrix}$   $\begin{matrix} A \\ B \end{matrix}$

$\begin{bmatrix} 3 & 1 & 2 \\ 1 & 2 & 0 \end{bmatrix}$   $\begin{matrix} B \\ B \end{matrix}$

BA -68 21 35 -66 14 39

Apr 24-8:12 AM

$$\frac{x+6}{x^2+9x+20} = \frac{A(x+5)}{x+4} + \frac{B(x+4)}{x+5}$$

$(x+5)(x+4)$   $Ax+5A+Bx+4B$

$Ax+Bx$   $5A+4B=6$   
 $x(A+B=1)$   $-5(A+B=1)$   
 $A+1=1$   $-5A-5B=-5$   
 $A=2$   $5A+4B=6$   
 $-1B=1$   $B=-1$

$\frac{2}{x+4} - \frac{1}{x+5}$

Apr 23-11:01 AM

$$\frac{1x+8}{x^2+6x+8} = \frac{A(x+2)}{x+4} + \frac{B(x+4)}{x+2}$$

$(x+4)(x+2)$   $AX+2A+Bx+4B$

$AX+Bx$   $2A+4B=8$   
 $x(A+B=1)$   $-2A-2B=-2$   $\frac{-2}{x+4} + \frac{3}{x+2}$   
 $A+3=1$   $2B=6$   
 $A=-2$   $B=3$

Apr 23-11:33 AM

$$\frac{3x+5}{x^2+2x+1} = \frac{A(x+1)}{x+1} + \frac{B}{(x+1)^2}$$

$(x+1)(x+1)$   $AX+A+B$

$Ax=3$   $A+B=5$   
 $A=3$   $3+B=5$   $B=2$

$\frac{3}{x+1} + \frac{2}{(x+1)^2}$

Apr 25-10:39 AM

Findings	New Strategy

$$\frac{x^2 - x + 2}{x^3 - 2x^2 + x} = \frac{A}{x} + \frac{B}{x-1} + \frac{C}{(x-1)^2}$$

$$\frac{x(x^2 - 2x + 1)}{x(x-1)(x-1)} = \frac{Ax^2 - 2Ax + A + Bx^2 - Bx + Cx}{x(x-1)(x-1)}$$

$$Ax^2 + Bx^2 - 2Ax - Bx + Cx = x^2(A+B) - 2Ax - Bx + Cx$$

$$x^2(A+B=1) \quad x(-2A-B+C=-1)$$

$$2+B=1 \quad -2(2)-1+C=-1$$

$$B=-1 \quad -4+1+C=-1$$

$$-3+C=-1$$

$$C=2$$

$$A=2$$

$$\frac{2}{x} - \frac{1}{x-1} + \frac{2}{(x-1)^2}$$

Apr 23-11:40 AM

Apr 23-11:41 AM

## HOMWORK

...fraction addition turned inside out

7.3 (p. 506): 57-75 (all)

Apr 23-11:50 AM