9-27-13

3rd Trig

SAT Questions on Test

2-3 #16, 17

2-4 #20

2-6 #9, 11

Questions from Ch. 2 Pt 1

(24) $\frac{4x-5}{x-6}$ $x \neq 6$

(34) $x(3x-2)(2x+1)(5x-10)=0$

$x=0$ $\quad 3x-2=0 \;(+2\ +2) \Rightarrow \frac{3x}{3}=\frac{2}{3}$ $\quad 2x+1=0 \;(-1\ -1) \Rightarrow \frac{2x}{2}=\frac{-1}{2}$ $\quad 5x-10=0 \;(+10\ +10) \Rightarrow \frac{5x}{5}=\frac{10}{5}$

$x=0$ or $x=\frac{2}{3}$ or $x=-\frac{1}{2}$ or $x=2$

(33) $10x^2+27x-28=0$

$a=10$, $b=27$, $c=-28$, $4ac=-1120$

$x=\frac{-b\pm\sqrt{b^2-4ac}}{2a}$

$x=\frac{-27\pm\sqrt{729+1120}}{20}$

$x=\frac{-27\pm\sqrt{1849}}{20}$

$x=\frac{-27\pm43}{20}$

$x=\frac{-27+43}{20}$ or $x=\frac{-27-43}{20}$

$=\frac{16}{20}=\frac{4}{5}$ $\quad x=\frac{-70}{20}$

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

(35) $x^3+3x^2+2x=0$

$x(x^2+3x+2)=0$

$x(x+1)(x+2)=0$

$x=0$ or $x=-1$ or $x=-2$

(7) $6x^2 + 19x + 8$

a c

$a \cdot c = 48$

1, 48

2, 24

3, 16

4, 12

6, 8

19

$(6x^2 + 3x) + (16x + 8)$

$3x(2x+1) + 8(2x+1)$

$(2x+1)(3x+8)$

9-27-13

4th Trig

Ch. 2 pt 1

(17) $(10k^3 - 5k^2) + (8k - 4)$

$5k^2(2k-1) + 4(2k-1)$

$(2k-1)(5k^2+4)$

(19) $(9x^3 - 3x^2) + (3x - 1)$

$3x^2(3x-1) + 1(3x-1)$

$(3x-1)(3x^2+1)$

(12) $27n^3 + 125y^3$

SOFAS

$(3n+5y)(9n^2 - 15ny + 25y^2)$

(12 #2) $5n^2y + 20n^3y^2$

$5n^2y(1 + 4ny)$

(35) $x^3 + 3x^2 + 2x = 0$

$x(x^2+3x+2) = 0$

$x(x+2)(x+1) = 0$

$x=0$ $\quad x+2=0$ $\quad x+1=0$

$x=-2$ $\quad x=-1$