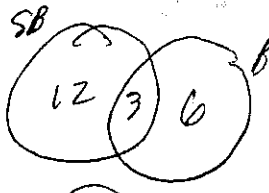
Algebra 1 Individual — Plant City '01

1) c



(9)

2) d $\frac{A}{B} = \frac{X}{60C}$

$X = \frac{60AC}{B}$

3) d $|X-(X+3)| + |X+3-X|$

$|-3| + |3|$

6

4) d $\frac{\frac{1}{4}}{5280} = \frac{4\frac{2}{3}}{X}$

$X = 98,560$

5) b $2(X^2+1)(X+1) - (X^2+1)(X-2)$

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

$2X^3+2X^2+2X+2 - X^3+2X^2-X+2$

X^3+4X^2+X+4

6) a $\frac{\frac{X}{Y} - \frac{Y}{X}}{X-Y} = \frac{\frac{X^2-Y^2}{XY}}{X-Y}$

$\frac{(X+Y)(X-Y)}{XY(X-Y)} = \frac{X+Y}{XY}$

7) b $(X^2-4)\left(\frac{2}{X-2} + \frac{1}{X+2} - \frac{2X}{X^2-4}\right) = 2$

$2(X+2) + X - 2 - 2X = 2(X^2-4)$

$2X+4+X-2-2X = 2X^2-8$

$2X^2 - X - 10 = 0$

$X = \frac{+1 \pm \sqrt{1^2-4(2)(-10)}}{2 \cdot 2}$

$X = \frac{1 \pm \sqrt{81}}{4}$

$X = \frac{10}{4}$ or $X = \frac{-8}{4}$

$\left\{\frac{5}{2}, -2\right\}$

8) $abc\left(\frac{1}{a}+\frac{1}{b}=\frac{1}{c}\right)$

d $bc+ac=ab$

$bc-ab=-ac$

$b(c-a)=-ac$

$b=\frac{-ac}{c-a}$

$b=\frac{ac}{a-c}$

9) $-3+4=1$

c

10) b

11) $-25+25+25-25=0$

a

12) $\text{median}=\frac{17+28}{2}=\frac{45}{2}$

b $\text{mode}=28$

$\frac{28+22.5}{2}=\frac{50.5}{2}$

$=25.25$

13) $y=\frac{14.4-8}{2.4}=$

b $\frac{56-8}{8}=\frac{48}{8}$

$=6$

14)

$1+2+3+\ldots.23$

c $=276$

15) $(2r+8)32=16r+16$

a $64r+256=16r+16$

$48r=-240$

$r=-5$

16) $3p^4(4r^2-9)$

c $3p^4(2r+3)(2r-3)$

17) $\frac{ea}{g}=k$ $\frac{12.32}{g}=4$

c $\frac{6\cdot12}{18}=4$ $4g=36$

$g=9$

18) $10y+9=109$

b $10y=100$

$y=10$

algebra I
Individual

19) $2p+2q \overline{)6p^2+10pq+6q^2}$ $\quad 3p+2q$

$6p^2+4pq$

$6pq+6q^2$

$6pq+4q^2$

$2q^2$

b)

20) $x=15$ $\quad 15+17=32$

$x+2=17$

d $x^2-(x+2)^2=64$

$x^2-(x^2+4x+4)=64$

$-4x-4=64$

$-4x=$

$(x+2)^2-x^2=64$

$x^2+4x+4-x^2=64$

$4x=60$

$x=15$

21) $5(2x+4y=-4)$ $\quad 10x+20y=-20$

c $2(-5x-7y=4)$ $\quad -10x-14y=8$

$6y=-12$

$y=-2$

$2x+4\cdot-2=-4$

$2x=4$

$x=1$

$1+2=-1$

22) $3^2 4^2 3\cdot4\cdot3\cdot4=20,736$

c

23) b

		6 years ago
Billy B	$x+5$	$x-6$
Jimbo	x	$x-1$
Ellie Mae	$x+16$	$x+10$

$x+10=21$

$x=11$

$x+5=16$

24) $7^2-7(-3)+-3$

c $49+21-3$

67

25) $y=2x+5$

c $m=2$

$y-1=-\frac{1}{2}(x-4)$

$y=\frac{1}{2}x+3$

26) x

$x-40$

C

12) $\frac{2}{3}(x-40)=\frac{1}{4}x$

$8x-320=3x$

$5x=320$

$x=64$

27) $10x+4.20=25.14$

b $10x+80=350$

$10x=270$

$x=27$

28) $0.167(12)=2.004$

b

29)

C $15^2=12^2+b^2$

$b^2=81$

$b=9$

30) $x(x-1)=0$

d $x=0$ or $x-1=0$

$x=1$