9-11-13

3rd Trig

Chapter 1 Pt 1

#36 $n^{-3} \cdot y^{5} \cdot n^{-2} \cdot y^{-3}$

$$\frac{y^5}{n^3 n^2 y^3} = \frac{yy\cancel{yyy}}{nnn\,nn\,\cancel{yyy}}$$

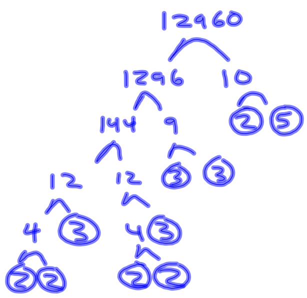
$$\frac{y^2}{n^5}$$

37 $$\frac{c^3 w^{-5} h^{-1}}{c^{-1} w^{-2} h}$$

$$\frac{c^3 c^1 w^2}{w^5 h \quad h} = \frac{ccc\,c\,\cancel{ww}}{www\cancel{ww}\,h\,h}$$

$$= \frac{c^4}{w^3 h^2}$$

31 $\sqrt[4]{12960}$



$$\sqrt[4]{1296} = \sqrt[4]{\cancel{2\cdot2\cdot2\cdot2}\cdot2\cdot\cancel{3\cdot3\cdot3\cdot3}\cdot5}$$

$$2\cdot3\sqrt[4]{25}$$

$$6\sqrt[4]{10}$$

41 $(2s^{-3}t^{2}u^{-1}d)^{-3}$

↓

$$\left(\frac{2t^2d}{s^3u}\right)^{-1\cdot3}$$

$$\left(\frac{s^3u}{2t^2d}\right)^{3}$$

$$\frac{s^3u}{2t^2d}\cdot\frac{s^3u}{2t^2d}\cdot\frac{s^3u}{2t^2d} = \frac{s^9u^3}{8t^6d^3}$$

(46) If $2^{k+m}=128$ and $3^m=27$, what is the value of 2^k?

$3^m=27 \therefore m=3$

$2^{\boxed{7}}=128$

$2^{k+3}=2^7 \therefore k=4$

$2^k=2^4=2\cdot2\cdot2\cdot2=16$

(27) $\sqrt{-600}$

600

200 (3)

(2) 100

10 10

(2)(5)(2)(5)

$\sqrt{\cancel{-1}\cdot\cancel{2\cdot2}\cdot2\cdot3\cdot\cancel{5\cdot5}}$

$2\cdot5\, i\sqrt{6}$

$10i\sqrt{6}$

(4) $5(7x-12)+2(3x+5)=7x-6$

$35x-60+6x+10=7x-6$

$41x-50=7x-6$

$-7x \qquad -7x$

$34x-50=-6$

$+50 \qquad +50$

$\frac{\cancel{34}x}{\cancel{34}}=\frac{44}{34}$

$x=1\frac{10}{34}=1\frac{5}{17}$

9-11-13

4^{th} Trig

Chapter 1 Pt 1 Questions

(1) $2(3n-1)-(3n-1)=2(2n+5)$

$6n\boxed{-2}-3n\boxed{+1}=4n+10$

$3n-1=4n+10$

$-3n \qquad -3n$

$-1=n+10$

$-10 \qquad -10$

$-11=n$

(46) If $2^{k+m}=128$ and $3^m=27$, then what is the value of 2^k?

$2^{\boxed{7}}=128$ $\qquad$ $3^{\overset{m}{\boxed{3}}}=27$

$k+m=7$

$4+3=7$

$2^k=2^4=16$