

8-27-13


3rd Trig

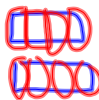
Simplify $\frac{30}{7}$

$$4\frac{2}{7}$$

Simplify $\frac{20}{19}$ ← how many you have
← put in groups of

$$1\frac{1}{19}$$

$$\frac{3}{\frac{1}{2}} = 6$$
 

$$\frac{2}{\frac{1}{4}} = 8$$
 

Solving for a variable

① $10n - (2n - 7) = 5n + 18$

$$10n - 2n + 7 = 5n + 18$$

$$8n + 7 = 5n + 18$$

$$\begin{array}{r} 8n + 7 = 18 \\ -5n \quad -5n \\ \hline 3n + 7 = 18 \\ -7 \quad -7 \\ \hline \end{array}$$

$$\frac{3}{3}n = \frac{11}{3}$$

$$n = 3\frac{2}{3}$$

② $-6n - (2n + 3) = -n - 8$

$$-6n - 2n - 3 = -n - 8$$

$$\begin{array}{r} -8n - 3 = -n - 8 \\ +8n \quad +8n \\ \hline \end{array}$$

$$\begin{array}{r} -3 = -n - 8 \\ +8 \quad +8 \\ \hline \end{array}$$

$$\frac{5}{7} = \frac{-1n}{7}$$

$$\frac{5}{7} = n$$

③ $2(2n+1) - 3(n-2) = 20$

$$4n + 2 - 3n + 6 = 20$$

$$n + 8 = 20$$

$$\begin{array}{r} n + 8 = 20 \\ -8 \quad -8 \\ \hline n = 12 \end{array}$$

④ If $3n+1=10$, what is $5n$?

$$\begin{array}{l} \vdots \\ n=3 \quad \therefore 5n=15 \end{array}$$

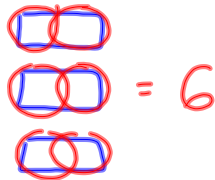
8-27-13
4th Trig

Fractions

$$\frac{19}{17} = 1\frac{2}{17}$$

$$\frac{14}{3} = 4\frac{2}{3}$$

$$\frac{3}{\frac{1}{2}} \leftarrow \text{how many I have}$$
$$\frac{1}{2} \leftarrow \text{put in groups of}$$



Solving for a variable

$$\textcircled{1} \quad 6n - (2n - 8) = n + n + 20$$

$$6n - 2n + 8 = n + n + 20$$

$$4n + 8 = \cancel{2n} + 20$$

$$\begin{array}{r} -2n \\ \hline 2n + 8 = 20 \end{array}$$

$$\begin{array}{r} -8 \quad -8 \\ \hline 2n = 12 \end{array}$$

$$\underline{2} \cdot n = \underline{12}$$

$$n = 6$$

$$\textcircled{2} \quad 3(2n - 1) = -3n + 1$$

$$6n - 3 = -3n + 1$$

$$\begin{array}{r} +3n \\ \hline 9n - 3 = 1 \end{array}$$

$$\begin{array}{r} +3 \quad +3 \\ \hline 9n = 4 \end{array}$$

$$\frac{9n}{9} = \frac{4}{9}$$

$$n = \frac{4}{9}$$