

Practice Test #3(e)

$$\frac{p+2}{4} = \frac{p-1}{5}$$

$$\cancel{20} \left(\frac{p+2}{4} \right) = \cancel{20} \left(\frac{p-1}{5} \right)$$

$$5(p+2) = 4(p-1)$$

$$\textcircled{v} \quad 5p + 10 = 4p - 4 \quad \textcircled{N}$$

5p	+10	=	4p	-4	Ⓝ
↓	-10		↓	-10	
5p	=	4p	-14		
↓		↓	↓		
-4p		-4p	-14		
p		=	-14		✓

$$5p + 10 = 4p - 4$$

$$\underline{-4p - 10} \quad \underline{-4p - 10}$$

$$p = -14$$

$$CD = 4 \times 5 = 20$$

#6 (a)

$$\begin{array}{r} x = 2 \\ + 3 \quad + 3 \\ \hline \end{array}$$

$$x + 3 = 5$$

$$2(x + 3) = 2(5)$$

$$\boxed{2(x + 3) = 10}$$

$$2x + 6 = 10$$

$$2x = 10 - 6$$

$$2x = 4$$

$$x = 2$$

$$x = 2$$

$$x - 5 = 2 - 5$$

$$x - 5 = -3$$

$$6(x - 5) = 6(-3)$$

$$\boxed{6(x - 5) = -18}$$

(b)

$$x = 2$$
$$3x = 3(2)$$

$$3x = 6$$

$$3x + 12 = 6 + 12$$

$$3x + 12 = 18$$

$$3x + 12 = 18$$
$$\underline{-12 \quad -12}$$

$$3x = 6$$
$$\underline{\quad \quad \quad 3 \quad \quad 3}$$

$$x = 2$$

#7

$$C = x + 0.07x + 0.1x$$
$$33.93 = x + 0.07x + 0.1x$$
$$\frac{33.93}{1.17x} = \frac{1.17x}{1.17}$$

$29 = x = \text{List price}$

Tax & Service $\Rightarrow 33.93 - 29 = \4.93
or $0.17(29) = 4.93$

33.93
↓
Total cost

#4 Solve.

$$\frac{g}{4} - 2 = \frac{g}{3}$$

To clear fractions
 $CD = 3 \times 4 = 12$

$$12\left(\frac{g}{4} - 2\right) = 12\left(\frac{g}{3}\right)$$

$$12\left(\frac{g}{4}\right) - 12(2) = 12\left(\frac{g}{3}\right)$$

$$\begin{array}{r} 3g - 24 = 4g \\ -3g \quad -3g \\ \hline -24 = g \end{array}$$

$-24 = g$

L.S.	R.S.
$\frac{g}{4} - 2$	$\frac{g}{3}$
$\frac{-24}{4} - 2$	$= \frac{-24}{3}$
$= -6 - 2$	$= -8$
$= -8$	$L.S. = R.S.$
	$\therefore g = -24$

$$34) \quad \frac{2g+1}{2} = 3 - \frac{g+1}{4} \quad \begin{array}{l} CD=2 \times 4 \\ = 8 \\ LCD=4 \end{array}$$

$$8\left(\frac{2g+1}{2}\right) = 8\left(3 - \frac{g+1}{4}\right)$$

$$4\cancel{8}\left(\frac{2g+1}{\cancel{2}}\right) = 8(3) - \cancel{8}\left(\frac{g+1}{\cancel{4}}\right)$$

$$4(2g+1) = 24 - 2(g+1)$$

$$8g + 4 = 24 - 2g - 2$$

$$\textcircled{1} \quad \begin{array}{r} 8g + 4 = 22 - 2g \quad \textcircled{2} \\ \underline{-4} \quad \underline{-4} \\ 8g = 18 - 2g \\ \underline{+2g} \quad \underline{+2g} \\ 10g = 18 \quad \begin{array}{l} \div 2 \\ \div 2 \end{array} \\ \hline \frac{10g}{10} = \frac{18}{10} \end{array}$$

$$\boxed{g = 1.8} \quad \text{or} \quad g = \frac{9}{5}$$