

a) $3(x + 2) = x + 10$

$$\begin{array}{rcl} 3x + 6 & = & x + 10 \quad | \quad -x \\ \hline 2x + 6 & = & 10 \quad | \quad -6 \\ \hline 2x & = & 4 \quad | \quad :2 \\ \hline x & = & 2 \end{array}$$

b) $5(x - 1) = 2x + 7$

$$\begin{array}{rcl} \underline{5x - 5} & = & \underline{2x + 7} \quad | \quad \underline{-2x} \\ \underline{3x - 5} & = & \underline{7} \quad | \quad \underline{+5} \\ \underline{3x} & = & \underline{12} \quad | \quad \underline{:3} \\ x & = & 4 \end{array}$$

c) $4(x + 1) = 3x + 5$

$$\begin{array}{rcl} \underline{4x + 1} & = & \underline{3x + 5} \quad | \quad \underline{- 3x} \\ \underline{x + 1} & = & \underline{5} \quad | \quad \underline{- 1} \\ \underline{x} & = & \underline{4} \quad | \quad \underline{\hspace{1cm}} \\ x & = & 4 \end{array}$$

d) $4(x + 2) = 3(x + 3)$

$$\begin{array}{rcl} 4x + 8 & = & 3x + 9 \quad | \quad -3x \\ \hline x + 8 & = & 9 \quad | \quad -8 \\ \hline x & = & 1 \quad | \quad \\ x & = & 1 \end{array}$$

e) $8(x + 3) = 6(5 + x)$

$$\begin{array}{rcl} \underline{8x + 24} & = & \underline{30 + 6x} \quad | \quad - 6x \\ \underline{2x + 24} & = & \underline{30} \quad | \quad - 24 \\ \underline{2x} & = & \underline{6} \quad | \quad : 2 \\ x & = & 4 \end{array}$$

f) $9(x + 1) = 7(3 + x)$

$$\begin{array}{rcl} \underline{9x + 9} & = & \underline{21 + 7x} \quad | - 7x \\ \underline{2x + 9} & = & \underline{21} \quad | - 9 \\ \underline{2x} & = & \underline{12} \quad | : 2 \\ x & = & 6 \end{array}$$

a) $8(x + 4) = 7(5 + x)$

[illegible]

b) $6(x + 2) = 4(x + 4)$

		6x	+	12	=	4x	+	16	 - 4x						
		2x	+	12	=	16			 - 12						
				2x	=	4			 : 2						
				x	=	2									

c) $12(1 + x) = 9(4 + x)$

		12	+	12	x	=	36	+	9x	-	9x				
		3x	+	12	=	36				-	12				
					3x	=	24			:	3				
					x	=	8								

d) $12(1 + x) = 5(x + 8)$

		12	+	12	x	=	5x	+	40		-	5x		
				7x	+	12	=	40				-	12	
					7x	=	28							
					x	=	4							

e) $7(x + 3) + 9 = 5(x + 8)$

[illegible]

f) $10(x - 4) = 2(x + 36)$

[illegible]