

Unit 6 Solutions

1) D	12) C
2) B	13) A
3) D	14) C
4) C	15) C
5) D	
6) C	
7) B	
8) D	
9) D	
10) C	
11) B	

$$18) x = 2\frac{4}{7}$$

or

$$x = \frac{18}{7}$$

$$19) 29 + 13d = 85 + 6d$$

$$20) w \geq 2$$

$$21) b < -1.8$$

22a) h: hours

$$13 + 2.35h \leq 29.45$$

$$b) h = 7$$

$$23) a) 500 + 35p \leq 4700$$

$$b) p \leq 120$$

$$24) x = 3$$

$$25) p = \frac{17}{3} \text{ or } 5\frac{2}{3}$$

$$26a) 28 + 0.38t = 22 + 0.46t$$

$$b) t = 75$$

<u>Left side</u>	<u>Right Side</u>
$28 + 0.38t$	$22 + 0.46t$
$28 + 0.38(75)$	$22 + 0.46(75)$
$28 + 28.5$	$22 + 34.5$
56.5	56.5

$56.5 \leftarrow \text{same}$

$$27) x < 25$$

$$28) d > 8$$

16. Here is a student's solution for this question: Solve: $3x + 5 = 18$

$$3x + 5 = 18$$

$$\frac{3x}{3} + 5 = \frac{18}{3}$$

$$x + 5 = 6$$

$$x + 5 - 5 = 6 - 5$$

$$x = 1$$

Identify any errors in the solution.

17. A student solved this equation: $4(3w - 6) = 3 - 6w$

$$12w - 6 = -3w$$

$$12w - 6 + 6 = -3w + 6$$

$$12w = -3w + 6$$

$$12w - (-3w) = -3w + 6 - (-3w)$$

$$12w - 24 = 3 - 6w$$