Algebra Bellwork - October 19, 2011

Which cell plan is the better deal?

Hall Mobile charges $35 for a pay-as-you-go phone and 20 cents a minute.

Torres Cellular charges only $5 for the phone, but 80 cents a minute.

Check your answers:

76. $2y + 4 = -6$ -5

77. $3x - 15 = 33$ 16

78. $-4n + 20 = 36$ -4

79. $-8 - c = 11$ -19

80. $3x + 5 = 12$ $\frac{7}{3}$

81. $-4y - 3 = 15$ $-\frac{9}{2}$

82. $8m - 4 = 8$ $\frac{3}{2}$

83. $-p + 3 = 10$ -7

1. $6x - 2 = x + 13$ 3

2. $5y - 3 = 2y + 12$ 5

3. $4k - 3 = 3k + 4$ 7

4. $5m + 3 = 3m + 9$ 3

27. $6x = 4(x + 5)$ 10

- Hall Mobile charges $35 for a pay-as-you-go phone and 20 cents a minute.
- Torres Cellular charges only $5 for the phone, but 80 cents a minute.

X = minutes

Total cost = $35 + .20x

Total cost = $5 + .80x

$35 + .20x = 5 + .80x$

$-.20x \quad -.20x$

$35 = 5 + .60x$

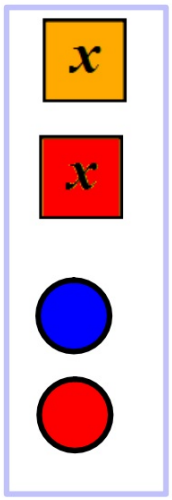
$-5 \quad -5$

$30 = .60x$

$3000 = 60x$

$\frac{3000}{60} \quad \frac{60}{60}$

$50 = x$



$$10 - 8y = 2(5 - 4y)$$

$10 - 8y = 10 - 8y$

Identity

Writing To solve $-\frac{1}{2}(3x - 5) = 7$, you can use the Distributive Property, or you can multiply each side of the equation by -2. Which method do you prefer? Explain why.

$$\frac{2}{3}(5x-2)=10$$

$$\frac{10}{3}x-\frac{4}{3}=10$$

p.82 #91-98 all; p.86 #5-10 all; p.83 #10-12 all

Simplify each expression.

91. $2 - 6$

92. $-9 \cdot (-3)$

93. $-9 + (-4)$

94. $16 \div (-4)$

95. $-7 + (-3)$

96. $-5 - (-3)$

97. $-5 \cdot 6$

98. $-25 \div (-5)$

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5. $8 - x = 2x - 1$

6. $2n - 5 = 8n + 7$

7. $3a + 4 = a + 18$

8. $6b + 14 = -7 - b$

9. $5a - 14 = -5 + 8a$

10. $3 + 4x = 3x + 6$

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10. $4(p + 1) = 2p - 2$

11. $5n - 3 = 2(n + 3)$

12. $2(k + 1) = 5(k - 2)$