WS - Solving Equations Practice

Date_____ Period____

Solve each equation.

1) $-\frac{1}{3}-\frac{1}{2}b=\frac{17}{30}$

2) $\frac{1}{3}=-\frac{4}{3}+\frac{1}{2}x$

3) $\frac{65}{12}=-\frac{3}{2}m+\frac{5}{3}$

4) $-\frac{1}{3}=-\frac{2}{3}+\frac{1}{2}m$

5) $3p-4-4=-6+8p-4-3p$

6) $x-3=-3+2x-x$

7) $-2b + 5(3 + 5b) = -5(1 - 5b)$

8) $-8(3x + 6) + 2x = x - 6(-2 + 3x)$

9) $-3(-2x + 7) - 8x = -3(x + 5)$

10) $-4k + 8k = 4(4 + k) - (-5 + 7k)$

11) Tim is choosing between two cell phone plans that offer the same amount of free minutes. Cingular's plan charges $39.99 per month with additional minutes costing $0.45. Verizon's plan costs $44.99 with additional minutes at $0.40. How many additional minutes, a, will it take for the two plans to cost the same?

12) UPS charges $7 for the first pound, and $0.20 for each additional pound. FedEx charges $5 for the first pound and $0.30 for each additional pound. How many pounds, p, will it take for UPS and FedEx to cost the same?

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Date_____ Period____

Solve each equation.

1) $-\frac{1}{3}-\frac{1}{2}b=\frac{17}{30}$

$\left\{-\frac{9}{5}\right\}$

2) $\frac{1}{3}=-\frac{4}{3}+\frac{1}{2}x$

$\left\{\frac{10}{3}\right\}$

3) $\frac{65}{12}=-\frac{3}{2}m+\frac{5}{3}$

$\left\{-\frac{5}{2}\right\}$

4) $-\frac{1}{3}=-\frac{2}{3}+\frac{1}{2}m$

$\left\{\frac{2}{3}\right\}$

5) $3p-4-4=-6+8p-4-3p$

$\{1\}$

6) $x-3=-3+2x-x$

{ All real numbers. }

7) $-2b + 5(3 + 5b) = -5(1 - 5b)$

$\{10\}$

8) $-8(3x + 6) + 2x = x - 6(-2 + 3x)$

$\{-12\}$

9) $-3(-2x + 7) - 8x = -3(x + 5)$

$\{6\}$

10) $-4k + 8k = 4(4 + k) - (-5 + 7k)$

$\{3\}$

11) Tim is choosing between two cell phone plans that offer the same amount of free minutes. Cingular's plan charges $39.99 per month with additional minutes costing $0.45. Verizon's plan costs $44.99 with additional minutes at $0.40. How many additional minutes, a, will it take for the two plans to cost the same?

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