Algebra 1   Bellwork   Monday, Sept. 29, 2014

1. Rusty's Car Rental charges $100 per day plus $0.30 per mile travelled.   Write and solve an equation to find the number of miles travelled if the total bill came to $168.10.

2. If Rent-a-Clunker charges $85 per day plus $0.35 per mile find the number of miles you would need to drive so that the rental bill would be the same for these two car rental company's.

3. Solve. $\frac{2}{3}(6m - 21) + 29 = -42$

4. Simplify. $-\frac{5}{6}R \cdot 84$

5. Simplify. $\frac{5}{16} + \frac{9}{12} - \frac{13}{8}$

$m = \#$ miles travelled

$$100 + .30m = 168.10$$
$$-100 \qquad\qquad -100$$
$$.30m = 68.10$$
$$\overline{.30} \qquad \overline{.30}$$

$\boxed{m = 227 \text{ miles}}$

Rusty's $= 100 + .30m$
Clunker $= 85 + .35m$

$$100 + .30m = 85 + .35m$$
$$-.30m \qquad\qquad -.30m$$
$$100 = 85 + .05m$$
$$-85 \quad -85$$
$$15 = .05m$$
$$\overline{.05} \qquad \overline{.05}$$

$\boxed{m = 300 mi}$

$\boxed{m = -\frac{57}{4} = -14.25}$

$4m - 14 + 29 = -42$
$4m + 15 = -42$
$\qquad -15 \quad -15$

$\dfrac{4m}{4} = \dfrac{-57}{4}$

$= \boxed{-70R}$

$\frac{3}{3} \cdot \frac{5}{16} + \frac{9 \cdot 4}{12 \cdot 4} - \frac{13}{8} \cdot \frac{6}{6}$

$\frac{15}{48} + \frac{36}{48} - \frac{78}{48} = \frac{-27}{48}$

$= \boxed{-9/16}$

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