

Name: KEY
Chapter 6 Practice Quiz (Sections 6.8 – 6.11)
Mr. McAusland -6th Math
April 23, 2013

Find the solution to each equation. YOU MAY NOT USE A CALCULATOR

1) $7 + x = 20$ $x =$ 13

$7 + ? = 20$
 $7 + 13 = 20$

2) $36 = y + 11$ $y =$ 25

$36 = ? + 11$
 $36 = 25 + 11$

3) $6 * z = 66$ $z =$ 11

$6 * ? = 66$
 $6 * 11 = 66$

4) $\frac{a}{5} = 35$ $a =$ 175

$? \div 5 = 35$
 $175 \div 5 = 35$

5) $b - 23 = 11$ $b =$ 34

$? - 23 = 11$
 $34 - 23 = 11$

6) $c * 7 = 50 - 36$

$c = \underline{2}$

$c * 7 = 14$

$(?) * 7 = 14$

$2 * 7 = 14$

7) $50 = 5(d - 4)$

$d = \underline{14}$

$50 = 5 * (?)$

$50 = 5 * 10$

$d - 4 = 10$

$(?) - 4 = 10$

$14 - 4 = 10$

8) $6 + (4e - 4) = 26$

$e = \underline{6}$

$6 + (?) = 26$

$6 + 20 = 26$

$4e - 4 = 20$

$(?) - 4 = 20$

$24 - 4 = 20$

$4e = 24$

$4 * (?) = 24$

$4 * 6 = 24$

9) $6 - f = 10 * 2$

$f = \underline{-14}$

$6 - f = 20$

$6 - (?) = 20$

$6 - (-14) = 20$

10) $(g + 10) / 3 = 6$

$g = \underline{8}$

$(?) / 3 = 6$

$18 / 3 = 6$

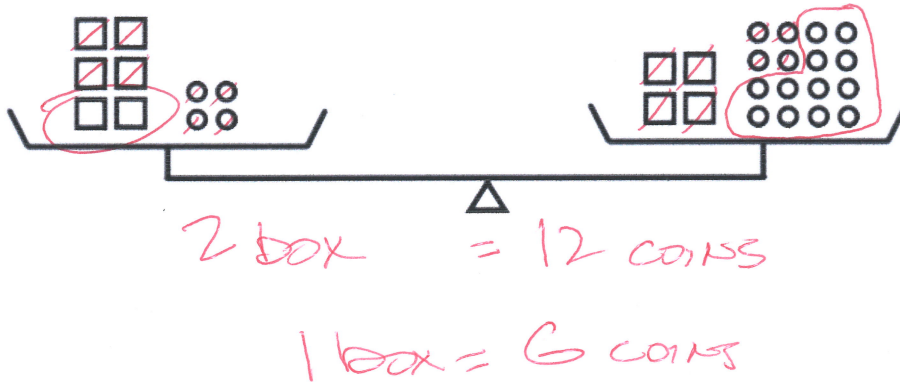
$g + 10 = 18$

$(?) + 10 = 18$

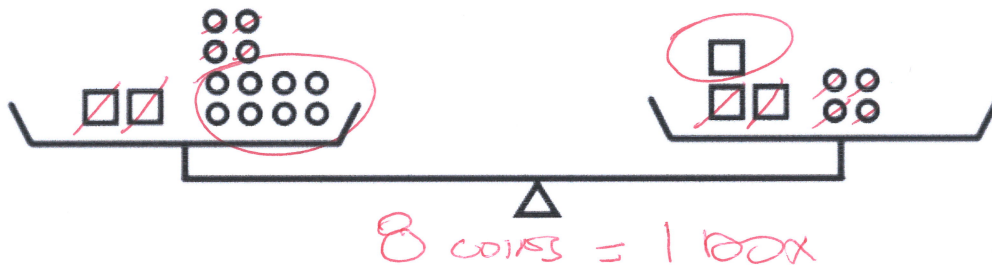
$8 + 10 = 18$

Solve each pan-balance problem. In each drawing, the two pans are in perfect balance.

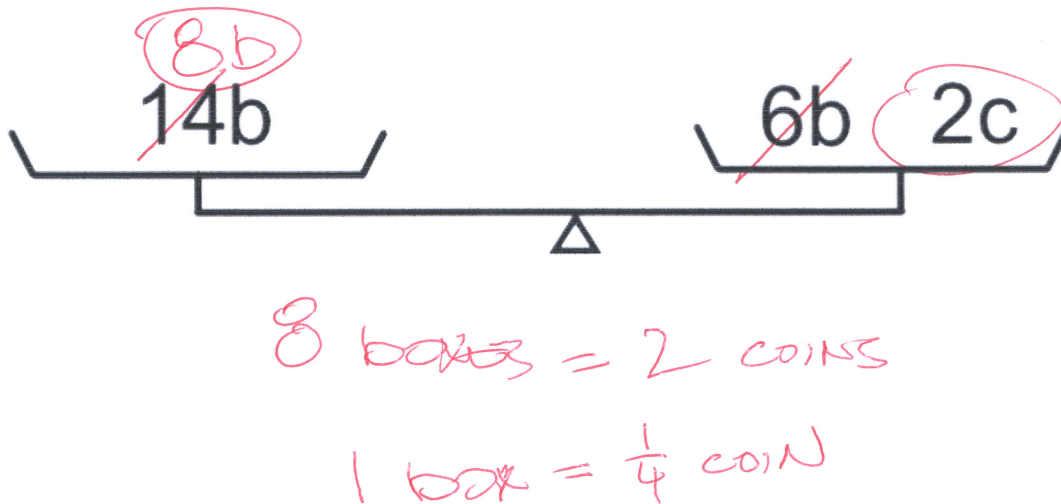
11) One box weighs as much as 6 coins



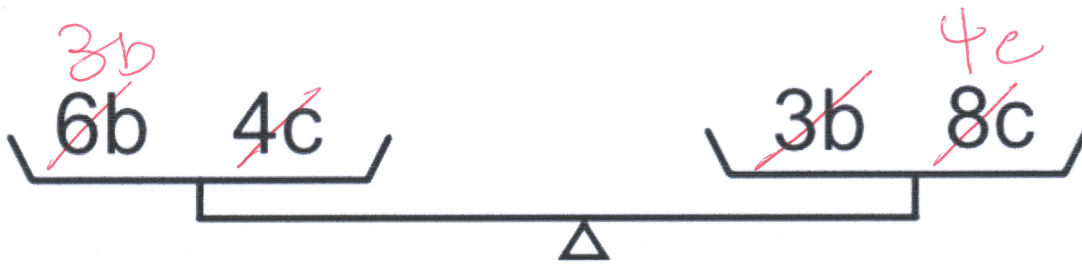
12) One box weighs as much as 8 coins



13) One b weighs as much as $\frac{1}{4}$ c



14) One b weighs as much as $\frac{4}{3}$ c



3 boxes = 4 coins

1 box = $\frac{4}{3}$ coins

Solve for the variable x. Show what operations you are applying to isolate the variable.
(YOU MUST SHOW WORK TO RECEIVE CREDIT)

15) $5x + 18 = 2x + 48$

x = 10

$$\begin{array}{r} -2x \quad -2x \\ \hline 3x + 18 = 48 \\ -18 \quad -18 \\ \hline \end{array}$$

$$\begin{array}{r} 3x = 30 \\ \frac{1}{3} \quad \frac{1}{3} \\ \hline \end{array}$$

x = 10

16) $-3x + 22 = 5x + 6$

x = 2

$$\begin{array}{r} +3x \quad +3x \\ \hline 22 = 8x + 6 \\ -6 \quad -6 \\ \hline \end{array}$$

$$\begin{array}{r} 16 = 8x \\ \frac{16}{8} \quad \frac{8x}{8} \\ \hline \end{array}$$

2 = x