

Name: _____

KEY

Unit 6 Practice Test

Mr. McAusland -6th Math

April 26, 2013

Divide. Show your work. Write your answers in simplest form.

1) $\frac{6}{5} \div \frac{3}{5} = \frac{6}{3} = \boxed{2}$
like
denominators

2) $2\frac{2}{4} \div \frac{1}{2}$
 $\frac{10}{4} \div \frac{1}{2}$
 $\frac{10}{4} \div \frac{2}{4} = \frac{10}{2} = \boxed{5}$

3) $4 \div \frac{3}{4}$
 $\frac{4}{1} \div \frac{3}{4}$
 $\frac{16}{4} \div \frac{3}{4} = \boxed{\frac{16}{3}}$

4) $2\frac{4}{10} \div 1\frac{1}{4}$
 $\frac{24}{10} \div \frac{5}{4}$
 $\frac{48}{20} \div \frac{25}{20} = \boxed{\frac{48}{25}}$

Solve

5) $82 + (-23)$

$82 - 23$

59

6) $8.2 - (-12.3)$

$8.2 + 12.3$

20.5

7) $\frac{4}{5} - \frac{7}{5}$

$-\frac{11}{5}$

8) $-12 - (-10)$

$-12 + 10$

-2

9) $14 * (-11)$

-154

10) $(-4 * 8) * (-2)$

$-32(-2)$

64

11) $\frac{28}{-7} = -4$

12) $-28 \div 4$

-7

Tell whether each number sentence is true or false

13) $6 + 12 / 3 = 2 * (7) - 6$

$6 + 4 = 14 - 6$

$10 = 8$ FALSE

14) $16 - 6 + 5 - (-2) > 10$

$16 - 6 + 5 + 2 > 10$

$10 + 5 + 2 > 10$

$15 + 2 > 10$

$17 > 10$ TRUE

15) $6 > 6$

FALSE

16) $-90 > -96$

FALSE

$$17) \quad 4^2 - 10 \cdot 2 \leq 0$$

$$16 - 10 \cdot 2 \leq 0$$

$$16 - 20 \leq 0$$

$$-4 \leq 0$$

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

$$18) \quad 7 + x = 16 \quad x = \underline{9}$$

$$7 + \textcircled{?} = 16$$

$$\boxed{\textcircled{9}} =$$

$$19) \quad 6 = y + 11 \quad y = \underline{17}$$

$$6 = \textcircled{?} + 11$$

$$\underline{\underline{17}}$$

$$20) \quad 4 \cdot z = 36 \quad z = \underline{9}$$

$$4 \textcircled{?} = 36$$

$$\underline{\underline{9}}$$

$$21) \quad 30 = 5(d - 4) \quad d = \underline{10}$$

$$30 = 5 \textcircled{?}$$

$$30 = 5 \cdot \underline{\underline{6}}$$

$$6 = d - 4$$

$$\underline{\underline{10}}$$

22) $(2e+4)-10=26$ $e = \underline{16}$

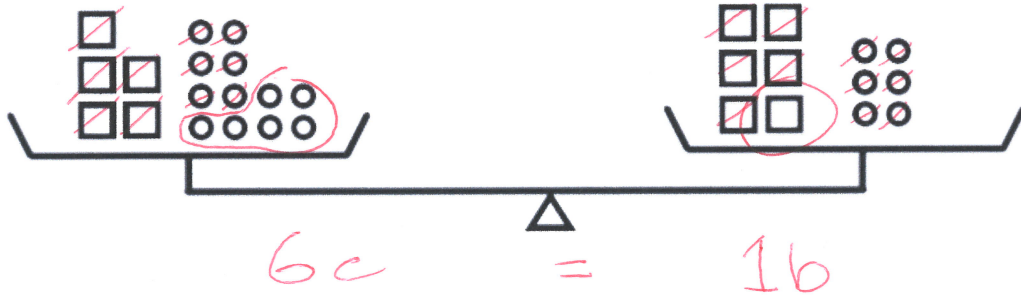
~~$2e$~~ - 10 = 26
 $\underline{\underline{36}}$

~~36~~ = $2e + 4$
 $\underline{\underline{32}}$ = $\bigcirc + 4$

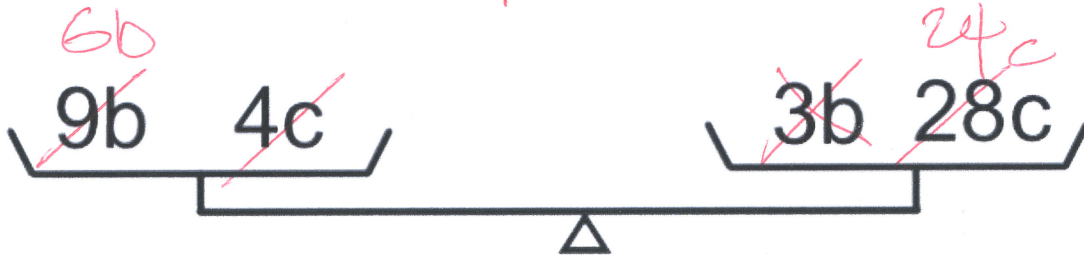
$2e = 32$
 $\underline{\underline{16}}$

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

23) One box weighs as much as 6 coins



24) One b weighs as much as 4 c



$\frac{9b}{9} = \frac{24c}{9}$

$b = 4c$

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

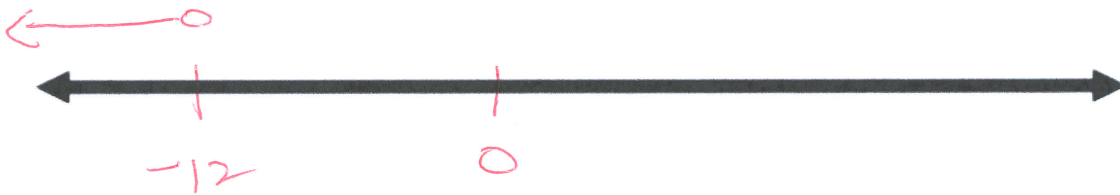
25) $7x + 40 = 11x + 8$

$x = \underline{8}$

$$\begin{array}{r} -7x \quad -7x \\ \hline 40 = 4x + 8 \\ -8 \quad -8 \\ \hline 32 = 4x \\ \frac{32}{4} = \frac{4x}{4} \\ 8 = x \end{array}$$

Graph the solution

26) $-12 > y$



27) $w - 3 \geq 2$

$$\begin{array}{r} w - 3 = 2 \\ \underline{+3} \end{array}$$

