

## Math 7 - Chapter 4 Equations Review 2 Worksheet

30 Q, 25 pt

**Problems 1-8: Translate the following expressions and equations into verbal sentences.**

You may use ONLY the following terms: sum, difference, product, quotient, more than, less than, is, number.

- $x+5$  5 more than a number, the sum of a number and 5
- $y-7$  7 less than a number, the difference of a number and 7
- $4x$  the product of 4 and a number
- $\frac{y}{-2}$  the quotient of a number and -2
- $x+3=-12$  3 more than a number is -12  
the sum of a number and 3 is -12
- $5=y-4$  5 is 4 less than a number  
5 is the difference of a number and 4
- $3x+4=16$  4 more than the product of 3 and a number is 16.
- $-24=4y-4$  -24 is 4 less than the product of 4 and a number

**Problems 9-20: Solve and check each equation.**

- $y-7=-9$   $y=-2$
- $-15x=-60$   $x=4$
- $17=\frac{x}{-4}$   $x=-68$
- $-3.3x=-99$   $x=30$
- $18=-\frac{5}{6}x$   $x=-21\frac{3}{5}$
- $-5r+6=21$   $r=-3$
- $7p+38=3$   $p=-5$
- $2b-23=-29$   $b=-3$
- $-9g-17=46$   $g=-7$
- $19.2+4.8a=33.6$   $a=3$
- $\frac{x}{12}-\frac{1}{3}=\frac{5}{6}$   $x=14$
- $-5(x-3)=-30$   $x=9$

**Problems 21-25: Translate each sentence into an equation, then find the number.**

- The sum of a number and negative seven is -13.  $x+(-7)=-13$   $x=-6$
- The difference of a number and negative eleven is 36.  $x-(-11)=36$   $x=25$
- Three times the difference of a number and six is 6.  $3(x-6)=6$   $x=8$
- Fourteen more than the quotient of a number and four is 13.  $\frac{x}{4}+15=13$   $x=-8$
- Thirty-seven is four times a number less than five.  $37=5-4x$   $x=-8$