EQUATIONS REVIEW

Name: _____

Date:_____

ONE STEP EQUATIONS
SHOW ALL WORK
1) What is happening to the variable?
2) What is the opposite of that?
3) Do the opposite to both sides of the equation.

Solve

1 $x + 19 = 53$ **2** $x - 4 = 32$ **3** $8 + x = 13$

4 $19x = 38$ **5** $96 = 4x$ **6** $\dfrac{x}{17} = 3$

7 $1.2x = 2.4$ **8** $96 = 3 + x$ **9** $2.2 = \dfrac{x}{4.5}$

TWO STEP EQUATIONS
SHOW ALL WORK
1) What two things are happening to the variable?
2) Do the add/subtract step first by doing the opposite to both sides.
3) Then do the mult/divide step by doing the opposite to both sides.

Solve.

10 $5x + 3 = 23$ **11** $14 = 2y - 4$ **12** $8 - x = 14$

13 $2 + \dfrac{x}{3} = 12$ **14** $3 = \dfrac{y}{5} - 2$ **15** $\dfrac{w}{10} + 2 = 5$

16 $3m + 2 = 14$ **17** $\dfrac{x}{2} - 4 = 3$ **18** $-2 + 1.5m = 10$

CROSS MULTIPLY
1) Make a cross.
2) Multiply the pair, divide the spare.

Solve by using cross multiply (round to the nearest <u>tenth</u>, if necessary)

19 $\dfrac{2}{7} = \dfrac{6}{x}$

20 $\dfrac{14}{x} = \dfrac{7}{3}$

21 $\dfrac{x}{5} = \dfrac{12}{20}$

MULTI- STEP EQUATIONS
SHOW ALL WORK
1) Expand any brackets (distributive property).
2) Collect like terms on each side.
3) Get the variable to only one side
4) What two things are happening to the variable?
5) Do the add/subtract step first by doing the opposite to both sides.
6) Then do the mult/divide step by doing the opposite to both sides.

25 $3x + 5 = 5x - 7$

26 $-x + 4 = -4x - 8$

27 $-4(x - 5) = x + 6 - 4x$

28 $-(2x + 3) = 5(3 - x)$

29 $3(x - 2) + 4x = -2(x - 6)$

30 $12 = \frac{3x}{2}$

31 $\frac{-7x}{2} + 18 = 4$

32 $2p^2 + 5 = 37$

33 $17 = 5 + 3(x - 1)$