Mental Math Problems (algebra):

- (1) Evaluate 2x for x = 3.
- (2) Evaluate $\frac{1}{x}$ for x = 3.
- (3) Evaluate $(x+1)^2$ for x = 1.
- (4) Evaluate a + b for a = b, b = -4.
- **(5)** Solve for x in 3x = 24
- **(6)** Solve for x in $\frac{1}{3}x = 8$
- (7) Solve for x in 5 + x = 20
- (8) Solve for x in x 5 = 5
- (9) Solve for x in x + 3 = 1
- (10) Solve for x in $\frac{1000}{100 + x} = 1$
- (11) If you have 75 cents in three coins, what are the coins?
- (12) If you have 75 cents in four coins, what are the coins?
- (13) If you have 75 cents in fifteen coins, what might the coins be?
- (14) If you have \$ 600 in six bills, what might the bills be?
- (15) If you have \$ 37 in thirteen bills, what might the bills be?
- (16) How fast (in MPH) are you going if you travel 75 miles in $1\frac{1}{2}$ hours?
- (17) How far can you go in three hours at 30 MPH?
- (18) How far can you go in 1 hour at 1 foot per second?
- (19) How many feet per second are you running if you cover 100 yards in 10 seconds?

1

- (20) Evaluate a divided by b for a = 10 and b = 4.
- (21) Evaluate the sum of $a + b \times c$, all over c for a = 6, b = 10, and $c = \frac{49}{33}$.
- (22) Evaluate the absolute value of 3 + 5 10
- (23) Simplify $(-2x) \times 7 10x$
- **(24)** Solve for x in $\frac{99}{x} = 3$