Solutions to problems:

1). Add the integers from 1 to 100:

    The pairs of numbers, 1 and 100, 2 and 99, etc. all add to 101.

    There are 50 such pairs, therefore 50 x 101 = 5050

2. The triples 3,4,5 | 6,8,10 etc. are Pythagorean Triples such that

    3x3 + 4x4 = 5x5 and 5x5 + 12x12 = 13x13 etc.

3. Traveling one mile in 50 seconds:

    You travel 1/50 mile in one second, therefore (1/50) x 60 miles in one minute and (1/50) x 60 x 60 =72 miles per hour

    Formula: (1/S) x 60 x 60 = your speed

4. Reaction time:

    60 miles per hour equals one mile per minute or one mile every 60 seconds. In one second you travel 5,280/60 = 88 feet. Therefore, in 0.75 second you travel (88) x 0.75 = 66 feet