Fastball

Aroldis Chapman of the Cincinnati Reds holds the record for the fastest pitches for an entire season. In the 2014 season, 295 of his 935 pitches were clocked at more than 100 mph. In 2015, he had more 100+ mph pitches than any other pitcher. On September 24, 2010, in a game against the San Diego Padres, Chapman’s pitch was clocked at 105.1 mph. At that speed, how long did it take for the ball to reach home plate, a distance of 60 feet 6 inches?
Four Negative Fours
Use four \(-4\)s and any operations. Write expressions equal in value to the following:

\[ \underline{\phantom{\text{blank}}} \] = 1

\[ \underline{\phantom{\text{blank}}} \] = 2

\[ \underline{\phantom{\text{blank}}} \] = 3

\[ \underline{\phantom{\text{blank}}} \] = 4

\[ \underline{\phantom{\text{blank}}} \] = 5

\[ \underline{\phantom{\text{blank}}} \] = 6

\[ \underline{\phantom{\text{blank}}} \] = 7

\[ \underline{\phantom{\text{blank}}} \] = 8

\[ \underline{\phantom{\text{blank}}} \] = 9

Six Negative Sixes
Use six \(-6\)s and any operations. Write expressions equal in value to the following:

\[ \underline{\phantom{\text{blank}}} \] = 1

\[ \underline{\phantom{\text{blank}}} \] = 2

\[ \underline{\phantom{\text{blank}}} \] = 3

\[ \underline{\phantom{\text{blank}}} \] = 4

\[ \underline{\phantom{\text{blank}}} \] = 5

\[ \underline{\phantom{\text{blank}}} \] = 6

\[ \underline{\phantom{\text{blank}}} \] = 7

\[ \underline{\phantom{\text{blank}}} \] = 8

\[ \underline{\phantom{\text{blank}}} \] = 9
James Naismith

James Naismith, born on November ______, ______, was a Canadian - American physical educator, sports coach, and physician. He is best known for inventing the sport of basketball and the 13 rules of the sport. He invented the game while working at the Springfield, Massachusetts YMCA with “rowdy” teenagers who had to be kept indoors because of the “harsh New England weather.” The first game of Basketball was played in______. Two years later in ______, basketball was introduced nationally by the YMCA. Basketball became an official Olympic game in ______. The Naismith Memorial Basketball Hall of Fame opened in ______.

Use the clues to fill in the missing numbers

Clues

A. The greatest single-digit triangular number.

B. This 19th century year is a prime number.
The sum of its digits is 16. Its ones digit is a factor of all numbers.

C. The game was played when Naismith was 30 years old.

D. See relationship to C.

E. The sum of the digits in the year is 19. The two-digit number formed by the tens and ones digits is a square number.

F. The digits of this 20th century year add to 24. The hundreds and ones digit are the same.
Balzano is a puzzle that will tap into your logical reasoning abilities. Read the directions carefully, then try your hand at Balzano Shapes.

Directions:
Your job is to figure out the Desired Arrangement (the solution) of three or more elements (shapes) from clues that provide information about the shapes and their locations. The possible shapes are circle, hexagon, square, and triangle.

The Arrangement Column shows sets of shapes in rows. In the Balzano puzzle below, the second row arranged in order from left to right is: hexagon, triangle, and circle.

Correct Shape in the Correct Place identifies the number of elements that are the correct shape AND are in the right place. The second row has zero shapes in the right place.

Correct Shape in the Wrong Place identifies the number of correct shapes BUT in the wrong place. There are 2 of these in the second row.

Incorrect Shape identifies the number of shapes that are do not belong in the arrangement. There is 1 of these in the second row.

<table>
<thead>
<tr>
<th>Arrangement</th>
<th>Correct shape in correct place</th>
<th>Correct shape in wrong place</th>
<th>Incorrect shape</th>
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