THE INSIDE AND OUTSIDE OF FOUR LETTER WORDS

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Letters are given their alphabetical values A = 1 to Z = 26

In each of the four categories addition, subtraction, multiplication and division, the first and last letters of a 4-letter word work together (H + O in HERO = 23) to give the same result as the second and third letters working together (E + R in HERO = 23):

addition

\[
\begin{align*}
\text{H} & \quad \text{E} & \quad \text{R} & \quad \text{O} & \quad \text{H} + \text{O} = 23 = \text{E} + \text{R} \\
8 & \quad 5 & \quad 18 & \quad 15
\end{align*}
\]

subtraction

\[
\begin{align*}
\text{S} & \quad \text{L} & \quad \text{I} & \quad \text{P} & \quad \text{S} - \text{P} = 3 = \text{L} - \text{I} \\
19 & \quad 12 & \quad 9 & \quad 16
\end{align*}
\]

multiplication

\[
\begin{align*}
\text{C} & \quad \text{E} & \quad \text{L} & \quad \text{T} & \quad \text{C} \times \text{T} = 60 = \text{E} \times \text{L} \\
3 & \quad 5 & \quad 12 & \quad 20
\end{align*}
\]

division

\[
\begin{align*}
\text{D} & \quad \text{R} & \quad \text{I} & \quad \text{B} & \quad \text{D} \div \text{B} = 2 = \text{R} \div \text{I} \\
4 & \quad 18 & \quad 9 & \quad 2
\end{align*}
\]

ADDITION

\[
\begin{align*}
4 & \quad 3 & \quad 2 & \quad 1 & \quad 4 + 1 = 3 + 2 \\
\text{B} & \quad \text{E} & \quad \text{A} & \quad \text{D} & \quad \text{B} + \text{D} = 6 = \text{E} + \text{A} \\
2 & \quad 5 & \quad 1 & \quad 4 & \quad 2 + 4 = 5 + 1 \\
\text{B} & \quad \text{A} & \quad \text{F} & \quad \text{E} & \quad \text{B} + \text{E} = 7 = \text{A} + \text{F} \\
\text{B} & \quad \text{A} & \quad \text{T} & \quad \text{S} & \quad \text{B} + \text{S} = 21 = \text{A} + \text{T} \\
\text{B} & \quad \text{E} & \quad \text{V} & \quad \text{Y} & \quad \text{B} + \text{Y} = 27 = \text{E} + \text{V} \\
\text{B} & \quad \text{O} & \quad \text{E} & \quad \text{R} & \quad \text{B} + \text{R} = 20 = \text{O} + \text{E} \\
\text{C} & \quad \text{A} & \quad \text{G} & \quad \text{E} & \quad \text{C} + \text{E} = 8 = \text{A} + \text{G} \\
\text{C} & \quad \text{O} & \quad \text{G} & \quad \text{S} & \quad \text{C} + \text{S} = 22 = \text{O} + \text{G}
\end{align*}
\]
F E E D  \quad F + D = 10 = E + E \\
G A Y S  \quad G + S = 26 = A + Y \\
H A L E  \quad H + E = 13 = A + L \\
H A N G  \quad H + G = 15 = A + N \\
H E D A  \quad H + E = 9 = E + D \\
(a place in Sweden) \\
I N D I  \quad I + I = 18 = N + D \\
J I B A  \quad J + A = 11 = I + B \\
(a place in Yemen) \\
J O I N  \quad J + N = 24 = O + I \\
J U D O  \quad J + O = 25 = U + D \\
K I C A  \quad K + A = 12 = I + C \\
(a place in Serbia) \\
L A M B  \quad L + B = 14 = A + M \\
L I N K  \quad L + K = 23 = I + N \\
L O A D  \quad L + D = 16 = O + A \\
L O B E  \quad L + E = 17 = O + B \\
L O P S  \quad L + S = 31 = O + P \\
M O R T  \quad M + T = 33 = O + R \\
N O D E  \quad N + E = 19 = O + D \\
O N Y X  \quad O + X = 39 = N + Y \\
P O U T  \quad P + T = 36 = O + U \\
S O O K  \quad S + K = 30 = O + O \\
(a female crab) \\
S O W S  \quad S + S = 38 = O + W \\
S P U R  \quad S + R = 37 = P + U \\
S T O P  \quad S + P = 35 = T + O
S U M O  S + O = 34 = U + M
T O N I  T + I = 29 = O + N
T U S T  T + T = 40 = U + S
(a place in Czechoslovakia)
W I S E  W + E = 28 = I + S
W I W I  W + I = 32 = I + W
(a girl’s first name)

SUBTRACTION

H E A D  H - D = 4 = E - A
4 2 1 3  4 - 3 = 1 = 2 - 1
H O L E  H - E = 3 = O - L
I R J A  I - A = 8 = R - J
(Irja is a diminutive of Irene)
J E D I  J - I = 1 = E - D
J O F A  J - A = 9 = O - F
(a clothing brand name)
K I C E  K - E = 6 = I - C
(a surname)
L Y R E  L - E = 7 = Y - R
M O C A  M - A = 12 = O - C
(a place in Puerto Rico)
O S I E  O - E = 10 = S - I
(a place in Poland)
P O D E  P - E = 11 = O - D
R O B E  R - E = 13 = O - B
R O A D  R - D = 14 = O - A
R O M P  R - P = 2 = O - M
S T E D  S - D = 15 = T - E
Ston is a city in Croatia


(a place in Italy)

(a first name)

(a company name)

(a species of flea beetle)

(a surname)

(a place in China)

(a surname)

(a first name)

MULTIPLICATION

6 3 2 1  \(6 \times 1 = 3 \times 2\)

1 3 3 9  \(1 \times 9 = 3 \times 3\)

(Acci is a Roman place name in Spain)

(a road name in Hawaii)

( Baba is a girl’s first name)
B A J E  B x E = 10 = A x J
(a place in Angola)

B A N G  B x G = 14 = A x N

B A R I  B x I = 18 = A x R
(a place in Italy)

B H A D  B x D = 8 = H x A
(a place in India)

C A C A  C x A = 3 = A x C
(a Roman goddess)

C L A D  C x D = 12 = L x A

D A D A  D x A = 4 = A x D
(father)

D A T E  D x E = 20 = A x T

F A F A  F x A = 6 = A x F
(an island in Tonga)

G A G A  G x A = 7 = A x G

K A K A  K x A = 11 = A x K
(a place in Iran, also a first name)

M A M A  M x A = 13 = A x M

O C E A  O x A = 15 = C x E
(a girl’s first name)

P A P A  P x A = 16 = A x P

Q A Q A  Q x A = 17 = A x Q
(a place in Iraq)

S A S A  S x A = 19 = A x S
(a place in Israel)
DIVISION

6 2 1 3 6 ÷ 3 = 2 ÷ 1

D R I B D ÷ B = 2 = R ÷ I
4 18 9 2 4 ÷ 2 = 18 ÷ 9

O L D E O ÷ E = 3 = L ÷ D

T E A D T ÷ D = 5 = E ÷ A

(tead is early English for a torch)