

# Countdown Challenge

## Integer Computation

Use the code in the columns below to solve the 3 puzzles at the bottom of the page. Here are some rules to help you:

**Rules for Multiplication and Division:** If the numbers in the equation have the same sign, the answer will be positive. If the numbers have different signs, the answer will be negative.

**Rules for Addition:** Numbers with the same signs should be added together. Numbers with different signs should be subtracted. Always use the sign of the larger number.

**Rules for Subtraction:** Subtracting a negative number is the same as adding its opposite. To solve: 1) reverse the sign of the subtrahend (second number); and 2) change the equation to addition. Then, simply follow the rules for addition!

### Multiplication & Division

$A = +4 \times +5 = +20$   
 $B = -4 \times -3 = +12$   
 $C = -4 \times +3 = -12$   
 $D = +4 \times -5 = -20$   
 $E = -25 \div -5 = +5$   
 $F = +25 \div -5 = -5$   
 $G = -36 \div -6 = +6$   
 $H = 100 \div 10 = \underline{\quad}$   
 $I = -100 \div 10 = \underline{\quad}$   
 $J = 100 \times -10 = \underline{\quad}$   
 $K = -40 \times 10 = \underline{\quad}$   
 $L = -50 \times -10 = \underline{\quad}$

### Addition

$M = +5 + +6 = +11$   
 $N = -5 + -6 = -11$   
 $O = -5 + +6 = +1$   
 $P = +5 + -6 = -1$   
 $Q = +6 + +1 = \underline{\quad}$   
 $R = -6 + -1 = \underline{\quad}$   
 $S = +6 + -2 = \underline{\quad}$   
 $T = -6 + +2 = \underline{\quad}$

### Subtraction

$U = +6 - -3$   
 $(+6 + +3) = 9$   
 $V = +6 - +3$   
 $(+6 + -3) = +3$   
 $W = -6 - -3$   
 $(-6 + +3) = -3$   
 $X = -6 - +3$   
 $(-6 + -3) = -9$   
 $Y = +5 - -3$   
 $(+5 + +3) = \underline{\quad}$   
 $Z = -5 - +3$   
 $(\underline{\quad} + \underline{\quad}) = \underline{\quad}$

#1

$\frac{-4}{1}$	$\frac{10}{3}$	$\frac{5}{5}$	$\frac{7}{-4}$	$\frac{9}{10}$	$\frac{-10}{5}$	$\frac{-12}{20}$	$\frac{-400}{500}$	$\frac{12}{20}$	$\frac{-7}{-8}$	$\frac{1}{8}$	$\frac{-3}{-20}$	$\frac{-11}{1}$	$\frac{-5}{6}$	$\frac{1}{1}$	$\frac{-9}{6}$	$\frac{-1000}{5}$	$\frac{9}{-20}$	$\frac{11}{9}$	$\frac{-1}{11}$	$\frac{5}{5}$	$\frac{-20}{-20}$
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#2

$\frac{11}{-1}$	$\frac{20}{1}$	$\frac{-4}{-3}$	$\frac{10}{5}$	$\frac{-10}{-7}$	$\frac{4}{-7}$
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#3

$\frac{-12}{500}$	$\frac{1}{9}$	$\frac{9}{-11}$	$\frac{-11}{-4}$	$\frac{-4}{-20}$	$\frac{-20}{1}$	$\frac{1}{-3}$	$\frac{-11}{-11}$	$\frac{500}{9}$	$\frac{9}{-12}$	$\frac{-12}{5}$	$\frac{5}{-20}$	$\frac{-20}{9}$
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