

Answer key

1 Alphametics

1. [4 points]

$$\begin{array}{r} \text{DOG} \\ + \text{LOG} \\ \hline \text{GOOD} \end{array}$$

$$\begin{array}{r} \boxed{2} \boxed{0} \boxed{1} \\ + \boxed{8} \boxed{0} \boxed{1} \\ \hline \boxed{1} \boxed{0} \boxed{0} \boxed{2} \end{array}$$

2. [7 points]

$$\begin{array}{r} \text{UN} \\ \text{UN} \\ + \text{NEUF} \\ \hline \text{ONZE} \end{array}$$

$$\begin{array}{r} \boxed{8} \boxed{1} \\ \boxed{8} \boxed{1} \\ + \boxed{1} \boxed{9} \boxed{8} \boxed{7} \\ \hline \boxed{2} \boxed{1} \boxed{4} \boxed{9} \end{array}$$

3. [10 points]

$$\begin{array}{r} \text{STEVE} \\ + \text{STEVE} \\ \hline \text{APPLES} \end{array}$$

$$\begin{array}{r} \boxed{8} \boxed{3} \boxed{4} \boxed{7} \boxed{4} \\ + \boxed{8} \boxed{3} \boxed{4} \boxed{7} \boxed{4} \\ \hline \boxed{1} \boxed{6} \boxed{6} \boxed{9} \boxed{4} \boxed{8} \end{array}$$

Answer key

4. [13 points]

$$\begin{array}{r} \text{COMPLEX} \\ + \text{LAPLACE} \\ \hline \text{CALCULUS} \end{array}$$

$$\begin{array}{r} \boxed{1} \boxed{8} \boxed{6} \boxed{4} \boxed{9} \boxed{2} \boxed{5} \\ + \boxed{9} \boxed{0} \boxed{4} \boxed{9} \boxed{0} \boxed{1} \boxed{2} \\ \hline \boxed{1} \boxed{0} \boxed{9} \boxed{1} \boxed{3} \boxed{9} \boxed{3} \boxed{7} \end{array}$$

5. [16 points]

$$\begin{array}{r} \text{BEARLIKE} \\ \text{YELLOW} \\ + \text{BEAR} \\ \hline \text{BERKELEY} \end{array}$$

$$\begin{array}{r} \boxed{9} \boxed{2} \boxed{3} \boxed{4} \boxed{6} \boxed{7} \boxed{8} \boxed{2} \\ \quad \boxed{1} \boxed{2} \boxed{6} \boxed{6} \boxed{0} \boxed{5} \\ \quad \quad \boxed{9} \boxed{2} \boxed{3} \boxed{4} \\ + \\ \hline \boxed{9} \boxed{2} \boxed{4} \boxed{8} \boxed{2} \boxed{6} \boxed{2} \boxed{1} \end{array}$$

Answer key

2 ABC

1. [4 points]

		C			
B		B	C	A	
	C	A			B
	A		B	C	
	B	C	A		A
					C

use letters
A, B, C

2. [7 points]

			A	A	
	C	B			A
	B		A	C	
A	A	C	B		
		A	C	B	B
			C	B	

use letters
A, B, C

3. [10 points]

			A	A	A	
D	D	C		B		A
		B		D	A	C
		D	A		C	B
	A		C		B	D
	C		B	A	D	
	B	A	D	C		
			A		D	D

use letters
A, B, C, D

Answer key

4. [13 points]

			B	B	
	C	A	B		
C			C	B	A
C		C	A		B
A	A	B		C	
	B			A	C
			B	A	A

use letters
 A, B, C

5. [16 points]

	B	E	A	D	E	D			
	B	E	A	D			C	F	F
D		D	F	C	E		B	A	A
A	A	F	E	B	C	D			D
B			B	F	A	C	D	E	E
	C			A	B	E	F	D	D
F	F	C	D	E		A		B	
E	E	B	C		D	F	A		A
D	D	A			F	B	E	C	
		A	C	E		B	E		

use letters
 A, B, C, D, E, F

