1. A hotel charges $139 per night for a room. Which equation shows the cost of staying 4 nights at this hotel?
2. 139x4=(100+30+9)x4=(100x4)+(30x4)+9=$511
3. 139x4=(100+30+9)x4=(100x4)+(30x4)+9=$529
4. 139x4=(100+30+9)x4=(100x4)+(30x4)+(9x4)=$556
5. 139x4=(100+30+9)x4=(100x4)+(30x4)+(9x4)=$880
6. Susan drove 390 miles from Minnesota to South Dakota. She plans to do this trip 4 times a year. How many total miles will Susan travel?
7. 390x4=(300+90)x4= (300x4)+(90x4)=4,800 miles
8. 390x4=(300+90)x4= (300x4)+(90x4= 1,560 miles
9. 390x4=(300+90)x4= (300x4)+ 90= 1,290 miles
10. 390x4=(300+90)x4= 300+(90x4)=660 miles
11. Any number can be written in expanded form, which is the sum of the place value of its digits. For example, 123 can be written as 100+20+3

Part A

Explain how using expanded form 4,000+ 30 +2 can be helpful to find the product of 5 and 4,032.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Part B

Now write equations to show how to find 5x 4,032 using expanded form.

Part C

The steps for finding 20 x 23 are shown. Fill in the blanks

20x23=20x(20+\_\_\_)=20x\_\_\_\_+20x\_\_\_\_=\_\_\_\_\_+60=

1. A bakery makes 640 muffins every day. Which equation shows how to find the number of muffins the bakery makes in a week?

A 600+(40x7)=600+280

B (600X 7)+40=4,200+40

C (60x7)+ (40x7)=420+280

D (600x7)+(40x7)= 4,200 +280

5. The model below shows a strategy used to solve 416x4.

400 10 6

|  |  |  |
| --- | --- | --- |
| 400x4= 1,600  4 | 10x4=40 | 6x4=24 |

What is the product?

A 1,664

B 1,640

C 1,624

D 1,600

1. Mrs. O’Grady told her class that Sam has $9 and Albert has 3 times as much money as Sam. She asked her students to write an expression to find the amount of money that Albert has. The table shows four students’ responses.

|  |  |
| --- | --- |
| Friend | Expression |
| Lily | 9+3 |
| Emilio | 9÷3 |
| Amanda | 9x3 |
| Brandon | 9-3 |

Who wrote the correct expression?

A Lily

B Emilio

C Amanda

D Brandon

1. A greenhouse has 12 rows of plants. Each row has 86 plants. The diagram below shows how to find the total number of plants in the greenhouse.

80 6

10

2

|  |  |
| --- | --- |
| 80x10=800 | ? |
| 80x2=160 | 6x2=12 |

800+160+60+12=1,032

Which equation goes in the box with the question mark?

A 6 x10=60

B 6x12=60

C6 +10= 60

D 80 x 6= 60

1. A parking lot has 27 rows. Each row has 13 parking spaces.

Part A

Fill in the area model below to find the total number cars that can be parked in the lot.

20 7

|  |  |
| --- | --- |
| 10  3 |  |
|  |  |

Show your work

Answer \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Each student in Mr. Smith’s class donated $15 for charity. There are 25 students in the class. One student correctly multiplied the numbers and got a total of $375. Which step was part of finding the total?

A 20+(5x20)+5(5x5)

B (10x20)+5+(10x5)+5

C (10 x20)+(5x20)+(10x5)+(5x5)

D (10x20)+ (10x5)+ (10x5)+(20x5)

10. Dion, Makenna and Chang were comparing their stamp collections. Each one has 489 stamps. Jorge drew this model to show how to find the number of stamps.

400 80 9

|  |  |  |
| --- | --- | --- |
| 400x3=1,200  3 | 80x3=240 | 9x3=27 |

Which equation shows the final step in finding the total number of stamps?

A 1,200+240+27=1,467

B 1,200+240=1,440

C 1,200+80+9= 1,289

D 1,200+27=1,227

1. Mr. Williams took his class of 28 students to the science museum. Each admission ticket costs $12. Which expression can be used to calculate the total cost of the tickets for the 28 students.

A (20x10)+(20x2)+(8x10)+(8x2)

B (20 +10) +(20+2)+(8+10) (8+2)

C (20x10)+(8x2)

D (20x2)+ (10x8)

12. Use the model below. What is 28x48

40 8

|  |  |
| --- | --- |
| 40x20=800  20  8 | 8x20=160 |
| 40x8=320 | 8x8=64 |

A 384

B 960

C 1,120

D 1,344