school nova ™

Review. :

1. Odd and even numbers. Adding and multiplying odd and even numbers.

2. Geometric shapes. Quadrilaterals, rectangles, squares. Perimeter, perimeter of composite shapes.

3. Algebraic expressions

1.

What is the missing number?

a) $6 + 6 + 6 + 6 + 6 + 6 = 3 \times 6 +$

b) $42 \div 7 = 54 \div$

2.

a) There are 8 pieces of chocolate in the box. How many pieces are there is 7 boxes?

b) 72 lollipops are shared equally among 8 children. How many lollipops will each child get?

c) 5 durians are sold for $8. How much will 20 durians cost?

3.   Both A stand for the same digit. What is A?

```
   2 A 0 6
 -   1 3 4 A
 _____
   1 4 5 8
```

4.
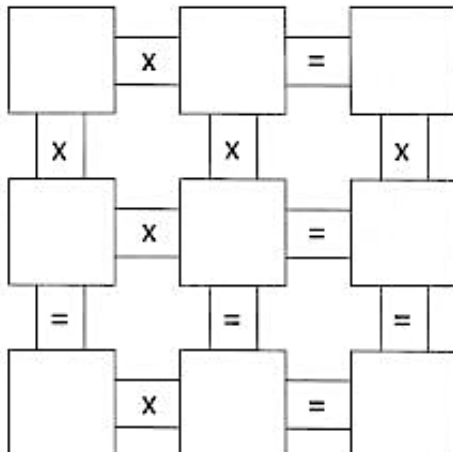
The difference between two numbers is 385.

What is the bigger number if the smaller number is 615?

5.

Michael inflated 116 balloons. He inflated 28 more red balloons than green balloons. How many red and green balloons did he inflate?

6.   Fill in the boxes, using numbers 1,2,2,3,3,4,8,12,24

Multiplication without regrouping

To multiply a 3-digit number, we start from the ones, then the tens and lastly the hundreds.

Find the product of 312 and 3.

```
  3 1 2
x     3
-------
  9 3 6
```

Multiply from right to left.

Step 1: Multiply the ones.
2 ones x 3 = 6 ones

Step 2: Multiply the tens.
1 ten x 3 = 3 tens

Step 3: Multiply the hundreds.
3 hundreds x 3 = 9 hundreds

The product of 312 and 3 is 936.

7. Multiply

a)
```
    4 0
x     2
-------
```

b)
```
    2 3
x     3
-------
```

c)
```
    5 2
x     4
-------
```

d)
```
  1 4 3
x     2
-------
```

8. Multiply. Write the correct number in each box.

a) 132 x 3 = ☐

b) 304 x 2 = ☐

Multiplication with regrouping

When we multiply, if the product of the digits in each place is 10 or greater, we **regroup**.

$$10 \text{ ones} = 1 \text{ ten}$$
$$10 \text{ tens} = 1 \text{ hundred}$$
$$10 \text{ hundreds} = 1 \text{ thousand}$$

Find the product of 475 and 3.

$$
\begin{array}{r}
{}^2 4 \ {}^1 7 \ 5 \\
\times \qquad 3 \\
\hline
1 \ 4 \ 2 \ 5
\end{array}
$$

Multiply from right to left.

Step 1: Multiply the ones.
5 ones x 3 = 15 ones
Regroup the ones.
15 ones = 1 ten 5 ones

Step 2: Multiply the tens.
7 tens x 3 = 21 tens
21 tens + 1 ten = 22 tens
Regroup the tens.
22 tens = 2 hundreds 2 tens

Step 3: Multiply the hundreds.
4 hundreds x 3 = 12 hundreds
12 hundreds + 2 hundreds = 14 hundreds
Regroup the hundreds.
14 hundreds = 1 thousand 4 hundreds

The product of 475 and 3 is 1425.

9.

a)
$$
\begin{array}{r}
3\,9 \\
\times \quad 2 \\
\hline
\\
\hline
\end{array}
$$

b)
$$
\begin{array}{r}
4\,8 \\
\times \quad 7 \\
\hline
\\
\hline
\end{array}
$$

c)
$$
\begin{array}{r}
5\,6 \\
\times \quad 4 \\
\hline
\\
\hline
\end{array}
$$

d)
$$
\begin{array}{r}
6\,5 \\
\times \quad 7 \\
\hline
\\
\hline
\end{array}
$$

10.   Write the correct answer in each box.

a) $34 \times 8 =$ ☐

b) $73 \times 9 =$ ☐

c) $120 \times 6 =$ ☐

d) $204 \times 7 =$ ☐

11.   Write the missing number in each box

a) $48 \times 6 = 40 \times 6 +$ ☐

b) $105 \times 8 = 100 \times 8 +$ ☐

c) $1000 -$ ☐ $= 25 \times 4$

d) $98 \times 7 = 100 \times 7 -$ ☐

12. Arrange the digits 5,0,9,4 in the boxes below to get the maximal product

□□□

X   □
_____

_____