Output numbers are produced from input numbers by using a certain rule. Work out the rule each time and enter the correct number in the box. A different rule is used for each question.

1 Input → Output

4	→	10
8	→	14
10	→	16
19	→	☐

2 Input → Output

3	→	8
5	→	12
10	→	22
14	→	☐

3 Input → Output

2	→	12
5	→	30
8	→	48
10	→	☐

4 Input → Output

32	→	7
28	→	6
20	→	4
8	→	☐

If $26 \times 6 = 156$

5 then $26 = 156 \div$ ☐

6 and $26 \times 60 =$ ☐

If $27 \times 13 = 351$

7 then $351 \div 27 =$ ☐

8 and ☐ $\times 13 = 3510$

Put the correct numbers in the squares.

9 $5 \times$ ☐ $= 10 \times 12$

10 $17 \times 4 = 34 \times$ ☐

11 $8 \times 36 =$ ☐ $\times 18$

12 Which multiples of 3 are greater than 1 but less than 10?

Ans _____

13 Which multiples of 8 are greater than 40 but less than 70?

Ans _____

14 List the common multiples of 2 and 5 which are less than 40 but greater than 1.

Ans _____

15 List the common multiples of 4 and 6 which are less than 40 but greater than 20.

Ans _____

NUMBER AND ALGEBRA 2 TEST TWO PAGE 1

Complete the multiplication table.

16

X	7	
3		
8		40
	42	

17 **18**

19

20 **21**

List the common factors of each pair of numbers.

22 4 and 10   Ans _____

23 8 and 36   Ans _____

24 6 and 12   Ans _____

Give the highest common factor of each pair.

25 9 and 12   ☐

26 10 and 45   ☐

27 18 and 36   ☐

28 Which factors of 15 are prime numbers?

Ans _____

29 List the prime numbers which are greater than 10 but less than 20.

Ans _____

30 Five numbers, less than 20, are triangular numbers. List them.

| 1 | 3 | ☐ | ☐ | ☐ |

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31 Take 9 away from 17 and multiply the answer by 9.

Ans _____

32 Multiply 8 by 6 and divide by 12.

Ans _____

33 Divide 100 by 5 and take away 7.

Ans _____

34 Multiply 5 by 7 and add on three times 6.

Ans _____