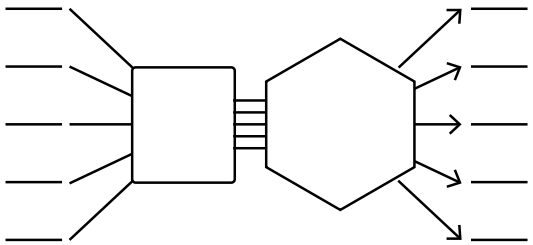
6 Complete the flow diagram and table using the verbal description.

The output value is 2,5 times the input value minus 3,2.

The input value is an even number between 0 and 12.



Input					
Output					

9 Complete.

	Number 1	Number 2	LCM	HCF	Number 1 × Number 2	LCM × HCF
1		24	24	3	72	
2	10	6				
3	18					108
4	20	6				
5	21	35				735
6	$18x$	$6x^2$	$18x^2$			
7	$14xy^3$	$42y^2$				
8	$10abc$					$80a^2b^3c^3$

7 Complete.

1 24

Product of prime factors = $2^3 \times 3^1$

Number of factors = $(3 + 1)(1 + 1) = 8$

All factors = {1; 2; 3; 4; 6; 8; 12; 24}

2 36

Product of prime factors = $2^{\_\_} \times 3^{\_\_}$

Number of factors = (___ + 1)(___ + 1) = ____

All factors = _____

3 30

Product of prime factors = _____

Number of factors = _____

All factors = _____

4 78

Product of prime factors = _____

Number of factors = _____

All factors = _____

5 $12x^2y$

Product of prime factors = _____

Number of factors = _____

All factors = _____

8 Find the LCM and HCF.

1 18 and 24

	Prime factorisation					
	2	3	5	7	11	
18	2	3^2				
24	2^3	3				
LCM (p^{max})	2^3	3^2				
HCF (p^{min})	2	3				

2 $8xy^2$ and $12x^2y$

	Prime factorisation					
$8xy^2$						
$12x^2y$						
LCM (p^{max})						
HCF (p^{min})						

10

HCF of fractions $= \frac{\text{HCF of numerators}}{\text{LCM of denominators}}$ **LCM of fractions** $= \frac{\text{LCM of numerators}}{\text{HCF of denominators}}$

1 HCF of $\frac{2}{9}$ and $\frac{8}{15} = \frac{2}{45}$

LCM of $\frac{2}{27}$ and $\frac{8}{9}$ = —

2 HCF of $\frac{7}{3}$ and $\frac{22}{15}$ = —

LCM of $\frac{7}{3}$ and $\frac{22}{15}$ = —

3 HCF of $\frac{12}{11}$ and $\frac{4}{15}$ = —

LCM of $\frac{12}{11}$ and $\frac{4}{15}$ = —

4 HCF of $\frac{8}{9}$ and $\frac{14}{16}$ = —

LCM of $\frac{8}{9}$ and $\frac{14}{16}$ = —

5 HCF of $\frac{9}{10}$ and $\frac{17}{24}$ = —

LCM of $\frac{9}{10}$ and $\frac{17}{24}$ = —