NUMBER PATTERNS

Treasure-hunter Jack has received a secret message in a sequence of numbers. Decoded, it will tell him the location of the world's largest diamond, the Golden Jubilee. The message is encoded in a "letter number" cipher. This is when letters are replaced as numbers. However only the MISSING NUMBERS will reveal the true location. Find out what these numbers are!

(Hint: The numbers follow a pattern. You will have to subtract, divide, add or multiply by a whole number or fraction to find the missing numbers.)

Example:

(+5) 5   10   15   20   **25**   Then the letter is Y

A	B	C	D	E	F	G	H	I	J	K	L	M
1	2	3	4	5	6	7	8	9	10	11	12	13
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
14	15	16	17	18	19	20	21	22	23	24	25	26

1.   5   10   ▢   40   80

2.   29   22   15   ▢   ▢

3. $\dfrac{27}{2}$ ▢   6   4 $\dfrac{8}{3}$

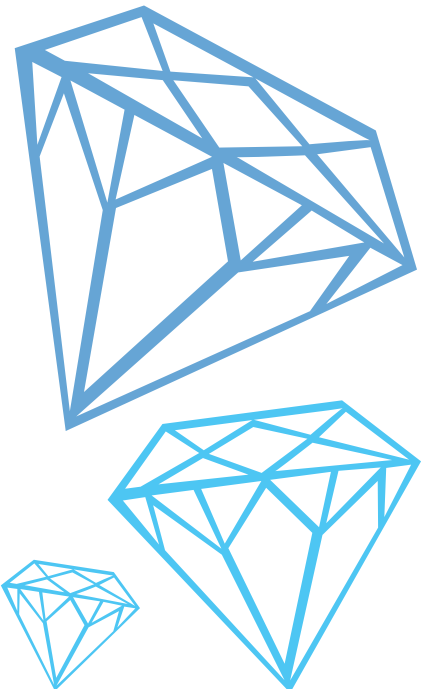4.   -60   -36   -12   ▢   36

5.   81   27   9   3   ▢

6.   3024   504   84   ▢ $\dfrac{7}{3}$

7.   20   16   12   8   ▢

Where is the location of the Golden Jubilee Diamond?

____ ____ ____ ____ ____ ____ ____ ____
 1   2a   2b   3   4   5   6   7