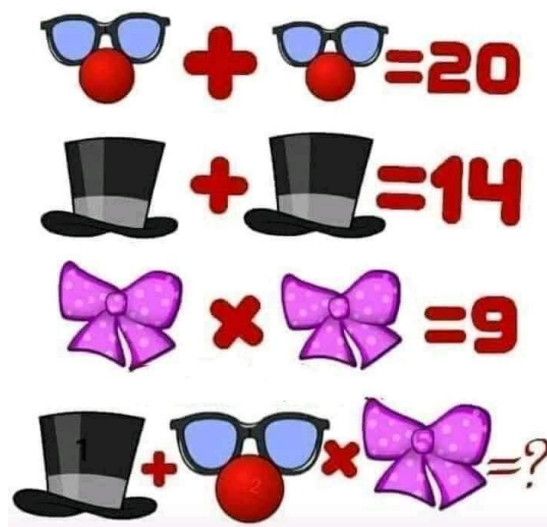


PUZZLE-1



PUZZLE-2



PUZZLE-3

If $a, b, c, d \in \mathbb{R}$ such that

$$a^7 + b^7 + c^7 + d^7 = 2188$$

$$a^6 + b^6 + c^6 + d^6 = 858$$

$$a^5 + b^5 + c^5 + d^5 = 244$$

$$a^4 + b^4 + c^4 + d^4 = 114.$$

Find $a + b + c + d$