

Group 1:

Message 1: $b = \underline{\quad 52 \quad}$ $k = \underline{\quad 23 \quad}$ $m = \underline{\quad 65 \quad}$ **answer=C**

Hint:

$$23 \cdot 23 - 48 \cdot 11 = 1.$$

Message 2: $b = \underline{\quad 36 \quad}$ $k = \underline{\quad 19 \quad}$ $m = \underline{\quad 77 \quad}$ **answer=E**

Hint:

$$19 \cdot 19 - 60 \cdot 6 = 1.$$

Group 2:

Message 1: $b = \underline{\quad 51 \quad}$ $k = \underline{\quad 19 \quad}$ $m = \underline{\quad 77 \quad}$ **answer=T**

Hint:

$$19 \cdot 19 - 60 \cdot 6 = 1.$$

Message 2: $b = \underline{\quad 32 \quad}$ $k = \underline{\quad 35 \quad}$ $m = \underline{\quad 39 \quad}$ **answer=A**

Hint:

$$35 \cdot 11 - 24 \cdot 16 = 1.$$

Group 3:

Message 1: $b = \underline{\quad 47 \quad}$ $k = \underline{\quad 23 \quad}$ $m = \underline{\quad 65 \quad}$ **answer=H**

Hint:

$$23 \cdot 23 - 48 \cdot 11 = 1.$$

Message 2: $b = \underline{\quad 35 \quad}$ $k = \underline{\quad 19 \quad}$ $m = \underline{\quad 77 \quad}$ **answer=R**

Hint:

$$19 \cdot 19 - 60 \cdot 6 = 1.$$

Group 4:

Message 1: $b = \underline{14}$ $k = \underline{35}$ $m = \underline{39}$ **answer=D**

Hint:

$$35 \cdot 11 - 24 \cdot 16 = 1.$$

Message 2: $b = \underline{71}$ $k = \underline{29}$ $m = \underline{91}$ **answer=E**

Hint:

$$29 \cdot 5 - 72 \cdot 2 = 1.$$

Group 5:

Message 1: $b = \underline{9}$ $k = \underline{23}$ $m = \underline{65}$ **answer=S**

Hint:

$$23 \cdot 23 - 48 \cdot 11 = 1.$$

Message 2: $b = \underline{88}$ $k = \underline{29}$ $m = \underline{91}$ **answer=T**

Hint:

$$29 \cdot 5 - 72 \cdot 2 = 1.$$

Group 6:

Message 1: $b = \underline{4}$ $k = \underline{29}$ $m = \underline{91}$ **answer=M**

Hint:

$$29 \cdot 5 - 72 \cdot 2 = 1.$$

Message 2: $b = \underline{37}$ $k = \underline{35}$ $m = \underline{39}$ **answer=I**

Hint:

$$35 \cdot 11 - 24 \cdot 16 = 1.$$
