

More Mental Math

To multiply $2,000 \times 120$, simply multiply 2×12 , and place four zeros on the end of the answer:

$$2,000 \times 120 = 240,000$$

Solve **division** by thinking of multiplication "backwards":

$$5,600 \div 70 = ?$$

Think what number times 70 will give you 5,600. Since $70 \times 80 = 5,600$, then $5,600 \div 70 = 80$.

You can **add in parts**.

$$76 + 120 + 65 = ?$$

First add 70 + 120 + 60 = 250. Then, 6 + 5 = 11. Lastly, 250 + 11 = 261.

The **order of operations** is:

1. Parentheses 2. Exponents; 3. Multiplication and division; 4. Addition and subtraction.

To calculate $9 \times 80 - 10 \times 70$, first solve 9×80 and 10×70 . Subtract only after those calculations.

$$9\times80\ -\ 10\times70$$

$$=$$
 720 $-$ 700 $=$ 20

In the expression $4,500 \div (5+45) \times 80$, solve 5 + 45 first. Then, divide.

$$4,500 \div (5+45) \times 80$$

$$=4,500 \div 50 \times 80$$

$$= 90 \times 80 = 7,200$$

1. Solve in your head.

a. 410 + 2 × 19	b. $3 \times 50 + 4 \times 150$	c. $70 \times 80 - 40 \times 50$
=	=	=
d. 14 + (530 – 440)	e. 45 + 56 + 35	f. $300 \div 5 - 400 \div 10$
=	=	=

2. Solve in your head.

a. 17 + = 110 **b.** 345 + = 1,000 **c.**
$$3 \times 40 + = 500$$

3. Divide. Remember that division can also be written using a fraction line.

a.
$$\frac{240}{4} =$$

c.
$$\frac{72}{9}$$
 =

e.
$$\frac{5,600}{10}$$
 =

$$\mathbf{c.} \frac{72}{9} = \mathbf{e.} \frac{5,600}{10} = \mathbf{g.} \frac{420}{20} = \mathbf{i.} \frac{420}{70} =$$

i.
$$\frac{420}{70}$$
 =

b.
$$\frac{7,200}{100} =$$

d.
$$\frac{450}{9} =$$

$$\mathbf{f.} \frac{8,000}{200} =$$

d.
$$\frac{450}{9} =$$
 f. $\frac{8,000}{200} =$ **h.** $\frac{10,000}{50} =$

$$\mathbf{j.} \frac{7,200}{800} =$$