

## 5.NBT.A.2 Multiplication Patterns in Solving Variables

5.NBT.A.2: Explain patterns in zeros of the product and in the placement of the decimal point.

1. Find the value of  $x$ .

- a.  $x \times 500 = 45,000$
- b.  $1,200 \times x = 360,000$
- c.  $70,000 \times 50 = x$
- d.  $8,000 \times 400 = x$
- e.  $40 \times x = 2,400$
- f.  $6,000 \times 9,000 = x$
- g.  $300 \times x = 27,000$
- h.  $x \times 180,000 = 7,200,000$

Answers:

- a.
- b.
- c.
- d.
- e.
- f.
- g.
- h.

2. A flower boutique's reported sales in a year are shown in the table on the right. Use the table to answer the questions below.

- a. Which flower bouquet was sold the most in terms of revenue? Hint: Revenue = Price  $\times$  Quantity Sold
- b. Which flower bouquet was sold the least in terms of revenue?

Yearly Flower Bouquet Sales

Flower Bouquet	Price (\$)	Quantity Sold
Sunset Roses	400	300
Notting Hill	600	400
La Vie En Rose	300	500
Greatest Love	5,800	100
Pink Puff	200	2,000

Answers:

- a.
- b.

3. There are 600 houses in a village. On average, 400 houses pay for extra cleaning services each month. Only 200 houses pay for extra security charges. The price of extra security charge a month is \$3 while extra cleaning services costs \$4. On average, how much money is collected from the houses each month?

Answer:

4. A tailor can sew about 40 mini dresses per fabric roll. The tailor bought some fabric rolls and has made 130 mini dresses out of them. The fabric rolls left can be made into 150 more mini dresses. How many fabric rolls did the tailor buy?

Answer:

5.  $x \times y = 750$  and  $x + 3 = 18$ . What will be the value of  $y$ ?

Answer:

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### Answer Key

1. Find the value of  $x$ .

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- $6,000 \times 9,000 = x$
- $300 \times x = 27,000$
- $x \times 180,000 = 7,200,000$

Answers:

- 90
- 300
- 3,500,000
- 3,200,000
- 60
- 54,000,000
- 90
- 40

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Answers:

- Greatest Love
- Sunset Roses

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Answer:  
\$2,200

4. A tailor can sew about 40 mini dresses per fabric roll. The tailor bought some fabric rolls and has made 130 mini dresses out of them. The fabric rolls left can be made into 150 more mini dresses. How many fabric rolls did the tailor buy?

Answer:  
7 fabric rolls

5.  $x \times y = 750$  and  $x + 3 = 18$ . What will be the value of  $y$ ?

Answer:  
50