

## Algebra: Patterns in Division

Rami has a 1,156-page book. If he reads 12 pages a day, about how long will it take him to finish reading the book?

You divide to find the answer.

$$1,156 \div 12$$

You can estimate to find the number of days it will take Rami to read the book.

Estimate: 1,156 rounds down to 1,000.

12 rounds down to 10.

$$1,000 \div 10$$

There are zeros in dividend and in divisor. Cancel out one zero in each.

$$1,000 \div 10 = 100$$

So, it will take Rami about 100 days to read the book.

You can check this estimate by multiplying. Multiply the divisor by the quotient.

$$10 \times 100 = 1,000$$

### Examples:

**A- Use basic facts and patterns to find the quotient.**

1)  $80 \div 8 = 8$

2)  $5,600 \div 7 = 800$

3)  $45,000 \div 90 = 500$

4)  $540,000 \div 60 = 9,000$

**B- Compare. Use  $<$ ,  $>$  or  $=$**

5)  $2,100 \div 70 \underline{=} 210 \div 7$

6)  $6,000 \div 30 \underline{\geq} 600 \div 3$

7)  $810 \div 90 \underline{\leq} 8,100 \div 9$

8)  $4,000 \div 100 \underline{=} 400 \div 10$