

Long Division Through Space

Long Division



Name: _____

Date: _____



Section 1: One-Digit Divisors

Divide. Show every step.

Example

$$156 \div 3 = 52$$

3 goes into 15 five times, $5 \times 3 = 15$, $15 - 15 = 0$,
bring down 6, 3 goes into 6 two times, $2 \times 3 = 6$, $6 - 6 = 0$

1) $84 \div 4$

$$4 \overline{) 84}$$

2) $365 \div 5$

$$5 \overline{) 365}$$

3) $432 \div 6$

$$6 \overline{) 432}$$

4) $756 \div 7$

$$7 \overline{) 756}$$

5) $912 \div 8$

$$8 \overline{) 912}$$

Section 2: Two-Digit Divisors

Estimate, then divide. Show every step.

Example



$$672 \div 21 = 32$$

21 goes into 67 three times, $3 \times 21 = 63$, $67 - 63 = 4$, bring down 2 to make 42, 21 goes into 42 two times, $2 \times 21 = 42$, $42 - 42 = 0$

1) $144 \div 12$

$$12 \overline{) 144}$$

2) $375 \div 15$

$$15 \overline{) 375}$$

3) $616 \div 22$

$$22 \overline{) 616}$$

4) $1,288 \div 23$

$$23 \overline{) 1,288}$$

5) $2,016 \div 32$

$$32 \overline{) 2,016}$$





Section 3: Remainders

Divide. Write what is left over as R.



Example

$$157 \div 4 = 39 \text{ R } 1$$
$$4 \times 39 = 156, 157 - 156 = 1$$

1) $59 \div 4$

$$4 \overline{) 59}$$

2) $247 \div 6$

$$6 \overline{) 247}$$

3) $500 \div 7$

$$7 \overline{) 500}$$

4) $836 \div 12$

$$12 \overline{) 836}$$

5) $1,305 \div 16$

$$16 \overline{) 1,305}$$





Section 4: Space Word Problems



Read the story. Divide to solve.

Example

96 stars are shared equally by 8 spaceships.
How many stars does each spaceship get?
 $96 \div 8 = 12$ stars.

- 1 4 aliens share 252 space cookies equally.
How many cookies does each alien get?



- 2 A rocket carries 384 astronauts in 16 equal groups.
How many astronauts are in each group?



- 3 A crew packs 725 moon rocks into boxes that hold 25 rocks each.
How many boxes do they fill?



- 4 A shop has 1,000 star stickers to put on posters, 12 stickers per poster.
How many full posters can they make, and how many stickers are left over?





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Answer Key

Teacher Copy

Section 1:

1) 21 2) 73 3) 72 4) 108 5) 114

Section 2:

1) 12 2) 25 3) 28 4) 56 5) 63

Section 3:

1) 14 R 3 2) 41 R 1 3) 71 R 3 4) 69 R 8 5) 81 R 9.

Section 4:

- 1) 63 cookies
- 2) 24 astronauts
- 3) 29 boxes
- 4) 83 posters, 4 stickers left over.

