MISSION 5 ★

ROBOT FACTORY NUMBER BUILDERS

5 MISSION

New mission. Bigger numbers.
New challenges. Let's go!

TODAY'S MISSION GOALS

- Work with bigger numbers
- Use smart strategies
- Solve multi-step challenges

WARM-UP: NUMBER SENSE

Compare the numbers using >, <, or =.

1. 3,482 ◯ 3,428
2. 7,195 ◯ 7,915
3. 25,067 ◯ 25,076
4. 60,300 ◯ 60,030
5. 89,999 ◯ 90,000

TIP: Line up the digits from left to right!

BUILD IT: MULTI-STEP MISSION

Solve each problem. Show your work!

1. The factory made 1,275 parts on Monday, 1,468 on Tuesday, and 1,387 on Wednesday. How many parts did they make in all?
2. A box has 248 bolts. If the factory uses 76 bolts, then makes 132 more, how many bolts are in the box now?
3. Professor Pixel has 3,456 gears. He uses 1,289 gears to build robots and orders 2,175 more. How many gears does he have now?
4. The factory packs 64 parts in each crate. If they have 9 crates, how many parts can they pack in all?
5. Bolt wants to build 8 robots. Each robot needs 125 parts. How many parts does he need in all?

Think: Read carefully. Take it one step at a time. Check your work!

BREAK IT DOWN: PLACE VALUE

Write each number in expanded form.
The first one is done for you!

1. 4,362 = 4,000 + 300 + 60 + 2
2. 7,815 = ____ + ____ + ____ + ____
3. 36,049 = ____ + ____ + ____ + ____ + ____ + ____
4. 58,307 = ____ + ____ + ____ + ____ + ____ + ____
5. 90,275 = ____ + ____ + ____ + ____ + ____ + ____

Break the number into thousands, hundreds, tens, and ones!

NUMBER MACHINE: INPUT → OUTPUT

Use the rule to find the outputs.

Rule: x 3, then + 7

INPUT	OUTPUT
9	
15	
28	
47	
63	

What rule is the machine using? Try a different input to check!

THINK LIKE AN ENGINEER

Use what you know to solve!

1. The factory has 2,345 red bolts and 3,678 blue bolts. How many bolts are there in all?

2. The shipping crate can hold 1,200 parts. They have 4 crates. If they already put 3,875 parts in the crates, how many more parts can they fit?

3. A robot costs $2,450 to build. The factory sells it for $3,275. How much profit do they make on each robot?

BONUS CHALLENGE

If the factory makes 125 robots in a month, how many parts do they need if each robot requires 238 parts?

PATTERN BUILDERS

What comes next in each pattern?

1. 1,000 1,250 1,500 1,750
2. 9,999 9,889 9,779 9,669
3. 2, 4, 8, 16, 32, 64,
4. 5,000 4,500 4,000 3,500

Look for the pattern. What is changing? What stays the same?

MISSION 5 COMPLETE!

You solved big problems, used smart strategies, and leveled up like an engineer!

AWESOME WORK, CADET!

EARNED GEAR

MATH MASTER LEVEL 5 BADGE

COMMANDER SAGE NOTES

What I did well: _____

What I want to practice: _____

A strategy I used: _____

Something new I learned: _____

My favorite part: _____

KEEP BUILDING. KEEP THINKING. YOU'RE A MATH MASTER!