

3RD GRADE

POWER



Problems & HD

Homework Edition

Name: _____

POWER PROBLEMS HOMEWORK 3.0A.1

Answer each question below.

1.) Mitch's neighbor hires him to walk his dog every day, and he pays him \$4 per walk. After 11 days of walking the dog, how much money will Mitch have if he has spent \$3 on candy?	2.) Lucinda helps her mom run her online business. Lucinda's mom pays her \$10 for each hour that she works. Lucinda works 6 hours this week. Then she goes to the movies and dinner with her friends and spent \$26. How much money does Lucinda have left?
3.) A teacher gives each student in an art class a pack of colored pencils. There are seven colored pencils in each pack, and there are 8 students in the class. At the end of class, the teacher collects 53 pencils. How many pencils are missing?	4.) Each cake a bakery makes has five roses made of frosting on top. A bakery has an order for 9 cakes. The customer wants the normal number of roses on each of the 9 cakes. How many roses will the bakery need to create to complete this order?

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POWER PROBLEMS HOMEWORK 3.0A.2

Answer each question below.

1.) Mr. Keller is packing lunches for his four children. He has 15 cookies. He wants to keep three cookies for himself. How many cookies can he give to each child?	2.) Marie bought a package with 30 trading cards in it. She picked out 6 special ones to add to her collection. Then, she decided to give the rest to her friends. If she gives an equal number of cards to each of her 8 friends, how many cards will each friend get?
3.) What are all of the ways that you can divide one dozen eggs into groups that are the same size?	4.) Hector has a bookshelf with six shelves. He has earned 11 speech awards and 13 debate awards. If he wants to arrange them evenly, how many awards should he put on each shelf?

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POWER PROBLEMS HOMEWORK 3.0A.3

Answer each question below.

1.) At a class party, a parent brought three boxes of cookies. Each box contains one dozen cookies. If there are 18 students in the class, how many cookies can each student have?	2.) A coach is handing out tennis balls for practice. Each container of tennis balls has three tennis balls in it. There are 24 containers of tennis balls, but one container is missing two tennis balls. If there are 10 players on the team, how many tennis balls can each player have?
3.) A car wash club has a car wash fundraiser. They charge \$5 per car, and they washed 16 cars. They also have a donation of \$20. If the entry fee for the swim meet is \$10 per person, how many swimmers will they be able to pay for with the amount that they have?	4.) George has 20 pictures of his family that he wants to put on the wall. He wants them to be in rows that each have the same number of pictures. What are all of the different ways that he can arrange the pictures?

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2.) Lucinda helps her mom with her online business. Lucinda's mom pays her \$10 for each hour that she works. Lucinda worked for 6 hours this week. Then she went to the movies and dinner with her friends and spent \$26. How much money does Lucinda have now?

3.) A teacher gives each student in an art class a pack of colored pencils. There are seven colored pencils in each pack, and there are 8 students in the class. At the end of class, the teacher collects 53 pencils. How many pencils are missing?

4.) Each cake a bakery makes has five roses made of frosting on the top. A bakery has an order for 9 cakes. The customer wants double the normal number of roses on two of the 9 cakes. How many frosting roses will the bakery need to create to complete this order?

POWER Problems HD

What is included?

- 36 conceptual based math questions
- Quality prompts and word problems that promote rigorous thinking
- 4 questions per standard
- Each standard is formatted to one page
- Easy prep
- Answer keys

WHAT ARE POWER PROBLEMS?



PURPOSEFUL - These problems are meant to keep students focused, while strengthening initiative and perseverance.



OPPORTUNITIES - These prompts can be used in a variety of ways. P.O.W.E.R problems can be used to introduce a lesson, spiral review, or as formative assessments.

WITH



ENGAGEMENT - Power Problems are real word applicable and designed to hook students with interest and presentation. The complexity of problems promotes problem solving skills.



RIGOR - Tasks are specifically designed to challenge students and assess conceptual understanding of curriculum versus procedural understanding. Students will need to apply more than just a "formula."

WHY USE POWER PROBLEMS?

BUILD STAMINA WITHIN
YOUR STUDENTS



MORE THAN JUST A COOKIE CUTTER TEXTBOOK APPROACH

- P.O.W.E.R problems are designed to challenge your students with their open ended presentation. Majority of problems that come from textbooks and workbooks assess procedural understanding of curriculum. Some textbooks even provide step by step instructions where the textbook is thinking for the students and taking away that "productive struggle" for children. When we rob students of that event, we rob them of their ability to reason, problem solve, and see beyond a standard algorithm. P.O.W.E.R problems are meant to show students that there are different ways to answer one question in math. With these tasks students take ownership and are part of the problem solving process versus filling in blanks in a textbook.

HOW TO USE POWER PROBLEMS

YOUR KIDS. YOUR
CHOICE. FLEXIBILITY.



TO INTRODUCE A LESSON - P.O.W.E.R problems can be used to introduce a new skill. In this case your students will experience a "productive struggle." Their problem solving skills and prior knowledge will kick in. Often times most of my students will have the incorrect answer or no answer at all. I then have someone explain their method/reasoning and allow my students to critique their peer's answer. This makes for great accountable talk discussions. If I see that most students do not have an answer I will assist the class in getting to a specific point and then allow them to finish independently.



SPIRAL REVIEW - Avoid your students forgetting standards by using P.O.W.E.R problems to spiral review previously taught lessons.



FORMATIVE ASSESSMENTS - You can use these problems to assess mastery and levels of understanding.