

RUSSIA: CRATER FULL OF DIAMONDS

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GRADE 6
EXPRESSIONS AND EQUATIONS

CCSS 6.EE.A* Apply and extend previous understandings of arithmetic to algebraic expressions.

CCSS 6.EE.A.1*

Write and evaluate numerical expressions involving whole-number exponents.

EXAMPLES OF STUDENT DISCOVERY

Introduce the story of the Crater Full of Diamonds. Present students with a problem similar to the following.

You found these diamonds; however, you must file a report with the government. The government is willing to give you a reward for finding and reporting the diamonds, but you must choose a plan.

- Plan A is that the government gives you a \$25,000 reward in one lump sum.
- Plan B is that the government gives you a total of \$1 the first month, \$2 for the second month, \$4 for the third month, and this pattern continues for two years.

Have students choose which option they would prefer, then find the amount after two years. From this point, you can discuss how students figured this out, how to write this in different ways, etc.