



Understanding Unit Rate

Name: _____

Solve each problem.

- 1) An old potato outputs $\frac{1}{2}$ of a volt of electricity, which is $\frac{1}{3}$ the amount of power needed for a small lightbulb. How many potatoes would you need to power the lightbulb?
- 2) A water hose had filled up $\frac{1}{3}$ of a pool after $\frac{1}{2}$ of an hour. At this rate, how many hours would it take to fill the pool?
- 3) A bag of grass seeds weighed $\frac{1}{2}$ of a kilogram. That was enough to cover $\frac{1}{3}$ of a front lawn with seed. How many bags would it take to completely cover a lawn?
- 4) A dejuicer was able to squeeze a pint of juice from $\frac{1}{2}$ bag of oranges. This amount of juice filled up $\frac{1}{3}$ of a jug. At this rate, how many bags will it take to fill the entire jug?
- 5) A bag of chocolate mix that weighed $\frac{1}{2}$ of a kilogram could make enough brownies to feed $\frac{1}{3}$ of the students at school. How many bags would be needed to feed all of the students?
- 6) A chef used $\frac{1}{2}$ of a bag of potatoes to make $\frac{1}{3}$ of a gallon of stew. If he wanted to make a full gallon of stew how many bags of potatoes would he need?
- 7) A small can of paint was $\frac{1}{2}$ of a liter. That was enough to fill $\frac{1}{3}$ of a paint sprayer. How many cans of paint would it take to completely fill the sprayer?
- 8) A restaurant took $\frac{1}{2}$ of an hour to use $\frac{1}{3}$ of a package of napkins. At this rate, how many hours would it take to use the entire package?
- 9) A discount bottle of perfume was $\frac{1}{2}$ of a liter. That was enough to fill $\frac{1}{3}$ of a jug. How many bottles of perfume would you need to fill the entire jug?
- 10) A pencil making machine took $\frac{1}{2}$ of a second to make enough pencils to fill $\frac{1}{3}$ of a box. At this rate, how long would it take the machine to fill the entire box?

Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____



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Answer Key

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Answers

1. **3 potatoes**
2. **$1\frac{1}{2}$ hours**
3. **3 bags**
4. **$1\frac{1}{2}$ bags**
5. **3 bags**
6. **$1\frac{1}{2}$ bags**
7. **3 cans**
8. **$1\frac{1}{2}$ hours**
9. **3 bottles**
10. **$1\frac{1}{2}$ seconds**