

**Solve each problem.**

- 1) 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?
- 2) 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?
- 3) 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?
- 4) A snail going full speed was taking $\frac{1}{2}$ of a minute to move $\frac{1}{3}$ of a centimeter. At this rate, how long would it take the snail to travel a centimeter?
- 5) 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?
- 6) A basket of lemons weighed $\frac{1}{2}$ of a pound and could make a cup of lemonade that was $\frac{1}{3}$ full. How many baskets of lemons would you need to fill up the entire cup?
- 7) 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?
- 8) 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?
- 9) 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?
- 10) Katie spent $\frac{1}{2}$ of an hour playing on her phone. That used up $\frac{1}{3}$ of her battery. How long would she have to play on her phone to use the entire battery?

Answers

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



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Answers

1. **$1\frac{1}{2}$ seconds**

2. **$1\frac{1}{2}$ bags**

3. **3 cans**

4. **$1\frac{1}{2}$ minutes**

5. **$1\frac{1}{2}$ hours**

6. **3 baskets**

7. **$1\frac{1}{2}$ hours**

8. **3 potatoes**

9. **3 bags**

10. **$1\frac{1}{2}$ hours**