



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 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 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) While exercising Mike walked  $\frac{1}{2}$  of a mile in  $\frac{1}{3}$  of an hour. At this rate, how far will he have travelled after an hour?
- 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 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?
- 7) 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?
- 8) A juicer 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?
- 9) A container of gasoline that held  $\frac{1}{2}$  of a liter could fill up  $\frac{1}{3}$  of a motorcycle gas tank. How many containers would you need to fill up the gas tank entirely?
- 10) It takes a baker  $\frac{1}{2}$  of an hour to make enough cookies to fill  $\frac{1}{3}$  of large box. How long would it take him to fill the whole box?

**Answers**

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_



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- 8) 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?
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**Answers**1.  **$1\frac{1}{2}$  seconds**2.  **$1\frac{1}{2}$  hours**3. **3 cans**4.  **$1\frac{1}{2}$  miles**5. **3 bags**6.  **$1\frac{1}{2}$  hours**7. **3 potatoes**8.  **$1\frac{1}{2}$  bags**9. **3 containers**10.  **$1\frac{1}{2}$  hours**