Understanding Unit Rate

Name:

Solve each problem.

1) 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?

2) 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?

3) A carpenter used $\frac{1}{2}$ of a box of nails while working on a birdhouse and was able to finish $\frac{1}{3}$ of it. At this rate, how many boxes will he need to finish the entire birdhouse?

4) 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?

5) An old potato outputs $\frac{1}{2}$ of a volt of electricty, which is $\frac{1}{3}$ the amount of power needed for a small lightbulb. How many potatoes would you need to power the lightbulb?

6) 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?

7) Paige 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?

8) While exercising Sam 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?

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) Gwen was using a container to fill up a fishbowl. The container held $\frac{1}{2}$ of a gallon of water and filled $\frac{1}{3}$ of the fishbowl. At this rate, how many containers will it take to fill the fishbowl?

Answers

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

1-10	90	80	70	60	50	40	30	20	10	0

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Answers

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

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