Understanding Unit Rate

Name: _____

Solve each problem.

1) A water hose had filled up $\frac{1}{5}$ of a pool after $\frac{1}{4}$ of an hour. At this rate, how many hours would it take to fill the pool?

2) A snail going full speed was taking $\frac{1}{8}$ of a minute to move $\frac{1}{7}$ of a centimeter. At this rate, how long would it take the snail to travel a centimeter?

3) A pencil making machine took $\frac{1}{4}$ of a second to make enough pencils to fill $\frac{1}{5}$ of a box. At this rate, how long would it take the machine to fill the entire box?

4) A dejuicer was able to squeeze a pint of juice from $\frac{1}{3}$ bag of oranges. This amount of juice filled up $\frac{1}{10}$ of a jug. At this rate, how many bags will it take to fill the entire jug?

5) Faye spent $\frac{1}{3}$ of an hour playing on her phone. That used up $\frac{1}{2}$ of her battery. How long would she have to play on her phone to use the entire battery?

6) While exercising Ned walked $\frac{1}{5}$ of a mile in $\frac{1}{4}$ of an hour. At this rate, how far will he have travelled after an hour?

7) A carpenter used $\frac{1}{3}$ 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?

8) A chef used $\frac{1}{9}$ 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?

9) A restaurant took $\frac{1}{6}$ of an hour to use $\frac{1}{8}$ of a package of napkins. At this rate, how many hours would it take to use the entire package?

10) A water hose had filled up $\frac{1}{6}$ of a pool after $\frac{1}{6}$ of an hour. At this rate, how many hours would it take to fill the pool?

Answers

1. _____

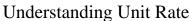2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

Math

Solve each problem.

1) A water hose had filled up $\frac{1}{5}$ of a pool after $\frac{1}{4}$ of an hour. At this rate, how many hours would it take to fill the pool?

1. $1\frac{1}{4}$ **hours**

2) A snail going full speed was taking $\frac{1}{8}$ of a minute to move $\frac{1}{7}$ of a centimeter. At this rate, how long would it take the snail to travel a centimeter?

2. $\frac{7}{8}$ **minute**

3) A pencil making machine took $\frac{1}{4}$ of a second to make enough pencils to fill $\frac{1}{5}$ of a box. At this rate, how long would it take the machine to fill the entire box?

3. $1\frac{1}{4}$ **seconds**

4. $3\frac{1}{3}$ **bags**

4) A dejuicer was able to squeeze a pint of juice from $\frac{1}{3}$ bag of oranges. This amount of juice filled up $\frac{1}{10}$ of a jug. At this rate, how many bags will it take to fill the entire jug?

5. $\frac{2}{3}$ **hour**

6. $\frac{4}{5}$ **mile**

7. **1 box**

5) Faye spent $\frac{1}{3}$ of an hour playing on her phone. That used up $\frac{1}{2}$ of her battery. How long would she have to play on her phone to use the entire battery?

8. $\frac{3}{9}$ **bag**

9. $1\frac{2}{6}$ **hours**

10. **1 hour**

6) While exercising Ned walked $\frac{1}{5}$ of a mile in $\frac{1}{4}$ of an hour. At this rate, how far will he have travelled after an hour?

7) A carpenter used $\frac{1}{3}$ 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?

8) A chef used $\frac{1}{9}$ 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?

9) A restaurant took $\frac{1}{6}$ of an hour to use $\frac{1}{8}$ of a package of napkins. At this rate, how many hours would it take to use the entire package?

10) A water hose had filled up $\frac{1}{6}$ of a pool after $\frac{1}{6}$ of an hour. At this rate, how many hours would it take to fill the pool?

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

Math