## Solve each problem. Answer as a mixed number (if possible).

1) A printer cartridge with $3 \frac{2}{3}$ milliliters of ink will print off $2 / 4$ of a box of paper. How many
milliliters of ink will it take to print an entire box?
2) A cookie recipe called for $3 \frac{1}{2}$ cups of sugar for every $5 / 6$ cup of flour. If you made a batch of cookies using 1 cup of flour, how many cups of sugar would you need?
3) A container with $3 / 5$ liters of weed killer can spray $1 / 4$ of a lawn. How many liters would it take to spray 1 entire lawn?
4) A bucket of water was $1 / 2$ full, but it still had $24 / 5$ gallons of water in it. How much water would be in one fully filled bucket?
5) A bike tire was $1 / 2$ full. It took a small air compressor $3 / 3$ seconds to fill it up. How long would it have taken to fill an empty tire?
6) It takes $2 \frac{1}{2}$ yards of thread to make $\frac{4}{6}$ of a sock. How many yards of thread will it take to make an entire sock?
7) A machine made $2 \frac{2}{3}$ pencils in $2 \frac{1}{4}$ minutes. How many pencils would the machine have made after 5 minutes?
8) A carpenter goes through $2 \frac{4}{5}$ boxes of nails finishing $3 \frac{1}{3}$ rooves. How much would he use finishing 4 rooves?
9) It takes $3 \frac{1}{4}$ spoons of chocolate syrup to make $2 \frac{1}{5}$ gallons of chocolate milk. How many spoons of syrup would it take to make 3 gallons of chocolate milk?
10) A bag with $3 / 6$ quarts of peanuts can make $2 \frac{3}{6}$ jars of peanut butter. How many quarts of peanuts would you need to make 5 jars?
1. 
2. $\qquad$
3. $\qquad$
4. $\qquad$
5. $\qquad$
6. $\qquad$
7. $\qquad$
8. $\qquad$
9. $\qquad$
10. $\qquad$

## Solve each problem. Answer as a mixed number (if possible).

1) A printer cartridge with $3 / 3$ milliliters of ink will print off $2 / 4$ of a box of paper. How many milliliters of ink will it take to print an entire box?
2) A cookie recipe called for $3 / 2$ cups of sugar for every $5 / 6$ cup of flour. If you made a batch of cookies using 1 cup of flour, how many cups of sugar would you need?
3) A container with $3 / 5$ liters of weed killer can spray $1 / 4$ of a lawn. How many liters would it take to spray 1 entire lawn?
4) A bucket of water was $1 / 2$ full, but it still had $24 / 5$ gallons of water in it. How much water would be in one fully filled bucket?
5) A bike tire was $1 / 2$ full. It took a small air compressor $3 / 3$ seconds to fill it up. How long would it have taken to fill an empty tire?
6) It takes $2 \frac{1}{2}$ yards of thread to make $\frac{4}{6}$ of a sock. How many yards of thread will it take to make an entire sock?
7) A machine made $2 \frac{2}{3}$ pencils in $2 \frac{1}{4}$ minutes. How many pencils would the machine have made after 5 minutes?
8) A carpenter goes through $2 \frac{4}{5}$ boxes of nails finishing $3 \frac{1}{3}$ rooves. How much would he use finishing 4 rooves?
9) It takes $3 / 4$ spoons of chocolate syrup to make $2 \frac{1}{5}$ gallons of chocolate milk. How many spoons of syrup would it take to make 3 gallons of chocolate milk?
10) A bag with $3 / 6$ quarts of peanuts can make $2 \frac{3}{6}$ jars of peanut butter. How many quarts of peanuts would you need to make 5 jars?

## Using Units Rates with Fractions

## Solve each problem. Answer as a mixed number (if possible).

Answers

| $5^{25} / 27$ | $5^{3} / 5$ | $4^{2} / 10$ | $3 / 8$ | $3^{18} / 50$ |
| :--- | :--- | :--- | :--- | :--- |
| $4^{19} / 44$ | $7^{2} / 6$ | $6^{2} / 3$ | $7^{30} / 90$ | $12^{4} / 5$ |

1) A printer cartridge with $3 \frac{2}{3}$ milliliters of ink will print off $2 / 4$ of a box of paper. How many milliliters of ink will it take to print an entire box?
2) A cookie recipe called for $3 \frac{1}{2}$ cups of sugar for every $5 / 6$ cup of flour. If you made a batch of cookies using 1 cup of flour, how many cups of sugar would you need?
3) A container with $3 / 5$ liters of weed killer can spray $1 / 4$ of a lawn. How many liters would it take to spray 1 entire lawn?
4) A bucket of water was $1 / 2$ full, but it still had $2 \frac{4}{5}$ gallons of water in it. How much water would be in one fully filled bucket?
5) A bike tire was $1 / 2$ full. It took a small air compressor $3 / 3$ seconds to fill it up. How long would it have taken to fill an empty tire?
6) It takes $2 \frac{1}{2}$ yards of thread to make $\frac{4}{6}$ of a sock. How many yards of thread will it take to make an entire sock?
7) A machine made $2 \frac{2}{3}$ pencils in $2 \frac{1}{4}$ minutes. How many pencils would the machine have made after 5 minutes?
8) A carpenter goes through $2 \frac{4}{5}$ boxes of nails finishing $3 \frac{1}{3}$ rooves. How much would he use finishing 4 rooves?
9) It takes $3 \frac{1}{4}$ spoons of chocolate syrup to make $2 \frac{1}{5}$ gallons of chocolate milk. How many spoons of syrup would it take to make 3 gallons of chocolate milk?
10) A bag with $3 / 6$ quarts of peanuts can make $2 \frac{3}{6}$ jars of peanut butter. How many quarts of peanuts would you need to make 5 jars?
2. $\qquad$
3. $\qquad$
4. $\qquad$
5. $\qquad$
6. $\qquad$
7. $\qquad$
8. $\qquad$
9. $\qquad$
10. $\qquad$

## Solve each problem. Answer as a mixed number (if possible).

1) A cookie recipe called for $24 / 5$ cups of sugar for every $2 / 3$ cup of flour. If you made a batch
of cookies using 1 cup of flour, how many cups of sugar would you need?
2) A machine made $2 \frac{2}{3}$ pencils in $2 / 3$ of a minute. It made pencils at a rate of how many per minute?
3) A water faucet leaked $2 / 5$ liters of water every $3 / 5$ of an hour. It leaked at a rate of how many liters per hour?
4) It takes $3 / 5$ yards of thread to make $2 / 3$ of a sock. How many yards of thread will it take to make an entire sock?
5) A container with $2 \frac{3}{4}$ gallons of weed killer can spray $2 / 6$ lawns. How many gallons would it take to spray 9 lawns?
6) A chef had to fill up $2 / 6$ of a container with mashed potatoes. He ended up using $2 \frac{3}{5}$ pounds of mashed potatoes. How many pounds would he use if he had to fill up the entire container?
7) It takes $3 \frac{1}{2}$ spoons of chocolate syrup to make $\frac{2}{4}$ of a gallon of chocolate milk. How many spoons of syrup would it take to make 1 gallon of chocolate milk?
8) It takes $3 / \frac{5}{6}$ gallons of water to fill up $2 \frac{2}{4}$ containers. How much water would it take to fill 3 containers?
9) A printer cartridge with $2 \frac{1}{6}$ milliliters of ink will print off $2 \frac{1}{3}$ reams of paper. How many milliliters of ink will it take to print 2 reams?
10) A tire shop had to fill $2 \frac{1}{2}$ tires with air. It took a small air compressor $3 / 2$ seconds to fill them up. How long would it take to fill 8 tires?
1. 
2. $\qquad$
3. $\qquad$
4. $\qquad$
5. $\qquad$
6. $\qquad$
7. $\qquad$
8. $\qquad$
9. $\qquad$
10. $\qquad$

## Solve each problem. Answer as a mixed number (if possible).

1) A cookie recipe called for $24 / 5$ cups of sugar for every $2 / 3$ cup of flour. If you made a batch of cookies using 1 cup of flour, how many cups of sugar would you need?
2) A machine made $2 \frac{2}{3}$ pencils in $2 / 3$ of a minute. It made pencils at a rate of how many per minute?
3) A water faucet leaked $2 / 5$ liters of water every $3 / 5$ of an hour. It leaked at a rate of how many liters per hour?
4) It takes $3 / 5$ yards of thread to make $2 / 3$ of a sock. How many yards of thread will it take to make an entire sock?
5) A container with $2 \frac{3}{4}$ gallons of weed killer can spray $2 \frac{5}{6}$ lawns. How many gallons would it take to spray 9 lawns?
6) A chef had to fill up $2 / 6$ of a container with mashed potatoes. He ended up using $2 / 5$ pounds of mashed potatoes. How many pounds would he use if he had to fill up the entire container?
7) It takes $3 \frac{1}{2}$ spoons of chocolate syrup to make $\frac{2}{4}$ of a gallon of chocolate milk. How many spoons of syrup would it take to make 1 gallon of chocolate milk?
8) It takes $3 / 6$ gallons of water to fill up $2 \frac{2}{4}$ containers. How much water would it take to fill 3 containers?
9) A printer cartridge with $2 \frac{1}{6}$ milliliters of ink will print off $2 \frac{1}{3}$ reams of paper. How many milliliters of ink will it take to print 2 reams?
10) A tire shop had to fill $2 \frac{1}{2}$ tires with air. It took a small air compressor $3 / 2$ seconds to fill them up. How long would it take to fill 8 tires?

| 1. | $4^{2} / 10$ |
| :---: | :---: |
| 2. | $4{ }^{0} / 6$ |
| 3. | $4 / 15$ |
| 4. | $4 \% 10$ |
| 5. | $8^{50} / 68$ |
| 6. | $7 \% / 10$ |
| 7. | $7^{0} / 4$ |
| 8. | $4^{36} / 60$ |
| 9. | $136 / 42$ |
| 10. | 11\% 10 |

## Using Units Rates with Fractions

## Solve each problem. Answer as a mixed number (if possible).

Answers

| $136 / 42$ | $7^{8} / 10$ | $4^{2} / 10$ | $4^{36} / 60$ | $4^{0} / 15$ |
| :---: | :---: | :---: | :---: | :---: |
| $8^{50} / 68$ | $4^{0} / 6$ | $11^{2} / 10$ | $7^{0} / 4$ | $4^{8} / 10$ |

1) A cookie recipe called for $24 / 5$ cups of sugar for every $2 / 3$ cup of flour. If you made a batch of cookies using 1 cup of flour, how many cups of sugar would you need?
2) A machine made $2 \frac{2}{3}$ pencils in $2 / 3$ of a minute. It made pencils at a rate of how many per minute?
3) A water faucet leaked $2 / 5$ liters of water every $3 / 5$ of an hour. It leaked at a rate of how many liters per hour?
4) It takes $3 \frac{1}{5}$ yards of thread to make $2 / 3$ of a sock. How many yards of thread will it take to make an entire sock?
5) A container with $2 \frac{3}{4}$ gallons of weed killer can spray $2 \frac{5}{6}$ lawns. How many gallons would it take to spray 9 lawns?
6) A chef had to fill up $2 / 6$ of a container with mashed potatoes. He ended up using $23 / 5$ pounds of mashed potatoes. How many pounds would he use if he had to fill up the entire container?
7) It takes $31 / 2$ spoons of chocolate syrup to make $\frac{2}{4}$ of a gallon of chocolate milk. How many spoons of syrup would it take to make 1 gallon of chocolate milk?
8) It takes $3 \frac{5}{6}$ gallons of water to fill up $2 \frac{2}{4}$ containers. How much water would it take to fill 3 containers?
9) A printer cartridge with $2 \frac{1}{6}$ milliliters of ink will print off $2 \frac{1}{3}$ reams of paper. How many milliliters of ink will it take to print 2 reams?
10) A tire shop had to fill $2 \frac{1}{2}$ tires with air. It took a small air compressor $3 / 2$ seconds to fill them up. How long would it take to fill 8 tires?
2. $\qquad$
3. $\qquad$
4. $\qquad$
5. $\qquad$
6. $\qquad$
7. $\qquad$
8. $\qquad$
9. $\qquad$
10. $\qquad$

## Solve each problem. Answer as a mixed number (if possible).

1) A machine made $2 / 6$ pencils in $3 / 5$ minutes. How many pencils would the machine have made after 2 minutes?
2) It takes $2 \frac{1}{2}$ spoons of chocolate syrup to make $3 \frac{1}{3}$ gallons of chocolate milk. How many spoons of syrup would it take to make 5 gallons of chocolate milk?
3) A cookie recipe called for $3 / 4$ cups of sugar for every $2 / 3$ cup of flour. If you made a batch of cookies using 1 cup of flour, how many cups of sugar would you need?
4) It takes $3 \frac{1}{3}$ yards of thread to make $1 / 3$ of a sock. How many yards of thread will it take to make an entire sock?
5) It takes $2 \frac{1}{2}$ gallons of water to fill up $3 \frac{1}{4}$ containers. How much water would it take to fill 9 containers?
6) A printer cartridge with $2 \frac{1}{6}$ milliliters of ink will print off $2 \frac{1}{2}$ reams of paper. How many milliliters of ink will it take to print 7 reams?
7) A carpenter goes through $2 \frac{2}{3}$ boxes of nails finishing $3 / 4$ of a roof. How much would he use finishing the entire roof?
8) A chef had to fill up $3 / 5$ of a container with mashed potatoes. He ended up using $21 / 2$ pounds of mashed potatoes. How many pounds would he use if he had to fill up the entire container?
9) A bag with $3 / 5$ quarts of peanuts can make $2 \frac{3}{4}$ jars of peanut butter. How many quarts of peanuts would you need to make 7 jars?
10) A container with $2 \frac{1}{2}$ gallons of weed killer can spray $3 \frac{1}{6}$ lawns. How many gallons would it take to spray 6 lawns?

## Solve each problem. Answer as a mixed number (if possible).

1) A machine made $2 / 6$ pencils in $3 / 5$ minutes. How many pencils would the machine have made after 2 minutes?
2) It takes $2 \frac{1}{2}$ spoons of chocolate syrup to make $3 \frac{1}{3}$ gallons of chocolate milk. How many spoons of syrup would it take to make 5 gallons of chocolate milk?
3) A cookie recipe called for $3 / 4$ cups of sugar for every $2 / 3$ cup of flour. If you made a batch of cookies using 1 cup of flour, how many cups of sugar would you need?
4) It takes $3 \frac{1}{3}$ yards of thread to make $1 / 3$ of a sock. How many yards of thread will it take to make an entire sock?
5) It takes $2 \frac{1}{2}$ gallons of water to fill up $3 \frac{1}{4}$ containers. How much water would it take to fill 9 containers?
6) A printer cartridge with $2 \frac{1}{6}$ milliliters of ink will print off $2 \frac{1}{2}$ reams of paper. How many milliliters of ink will it take to print 7 reams?
7) A carpenter goes through $2 \frac{2}{3}$ boxes of nails finishing $3 / 4$ of a roof. How much would he use finishing the entire roof?
8) A chef had to fill up $3 / 5$ of a container with mashed potatoes. He ended up using $21 / 2$ pounds of mashed potatoes. How many pounds would he use if he had to fill up the entire container?
9) A bag with $3 / 5$ quarts of peanuts can make $2 \frac{3}{4}$ jars of peanut butter. How many quarts of peanuts would you need to make 7 jars?
10) A container with $2 \frac{1}{2}$ gallons of weed killer can spray $3 \frac{1}{6}$ lawns. How many gallons would it take to spray 6 lawns?

Answers

| 1. | 158/102 |
| :---: | :---: |
| 2. | 315 |
| 3. | $5{ }^{2} / 8$ |
| 4. | $10 \%$ |
| 5. | $6^{24} / 26$ |
| 6. | $62 / 30$ |
| 7. | 35 |
| 8. | $41 / 6$ |
| 9. | $9^{37} / 55$ |
| 10 | $4^{28} / 38$ |

10. $\qquad$

## Using Units Rates with Fractions

## Solve each problem. Answer as a mixed number (if possible).

Answers

| $4^{28} / 38$ | $4^{1} / 6$ | $5^{2} / 8$ | $6^{2} / 30$ | $158 / 102$ |
| :--- | :--- | :--- | :--- | :--- |
| $9^{37} / 55$ | $3 / 9$ | $35 / 20$ | $10^{0} / 3$ | $6^{24} / 26$ |

1) A machine made $2 / 6$ pencils in $3 / 5$ minutes. How many pencils would the machine have made after 2 minutes?
2) It takes $2 \frac{1}{2}$ spoons of chocolate syrup to make $3 \frac{1}{3}$ gallons of chocolate milk. How many spoons of syrup would it take to make 5 gallons of chocolate milk?
3) A cookie recipe called for $3 / 4$ cups of sugar for every $2 / 3$ cup of flour. If you made a batch of cookies using 1 cup of flour, how many cups of sugar would you need?
4) It takes $3 \frac{1}{3}$ yards of thread to make $\frac{1}{3}$ of a sock. How many yards of thread will it take to make an entire sock?
5) It takes $2 \frac{1}{2}$ gallons of water to fill up $3 / 4$ containers. How much water would it take to fill 9 containers?
6) A printer cartridge with $2 \frac{1}{6}$ milliliters of ink will print off $2 \frac{1}{2}$ reams of paper. How many milliliters of ink will it take to print 7 reams?
7) A carpenter goes through $2 \frac{2}{3}$ boxes of nails finishing $3 / 4$ of a roof. How much would he use finishing the entire roof?
8) A chef had to fill up $3 / 5$ of a container with mashed potatoes. He ended up using $2 \frac{1}{2}$ pounds of mashed potatoes. How many pounds would he use if he had to fill up the entire container?
9) A bag with $3 / 5$ quarts of peanuts can make $2 \frac{3}{4}$ jars of peanut butter. How many quarts of peanuts would you need to make 7 jars?
10) A container with $2 \frac{1}{2}$ gallons of weed killer can spray $3 \frac{1}{6}$ lawns. How many gallons would it take to spray 6 lawns?
2. $\qquad$
3. $\qquad$
4. $\qquad$
5. $\qquad$
6. $\qquad$
7. $\qquad$
8. $\qquad$
9. $\qquad$
10. $\qquad$
11. $\qquad$

Solve each problem. Answer as a mixed number (if possible).
Answers

1) A water faucet leaked $23 / 5$ liters of water over the course of $2 / 5$ hours. How many liters
would it have leaked after 9 hours?
1. 
2. $\qquad$
3. $\qquad$
4. $\qquad$
5. $\qquad$
6. $\qquad$
7. $\qquad$
8. $\qquad$
9. $\qquad$
10. $\qquad$
6) A cookie recipe called for $2 \frac{1}{4}$ cups of sugar for every $2 \frac{1}{3}$ cups of flour. If you made a batch of cookies using 5 cup of flour, how many cups of sugar would you need?
7) A machine made $3 / 4$ pencils in $4 / 5$ of a minute. It made pencils at a rate of how many per minute?
8) It takes $2 \frac{5}{6}$ gallons of water to fill up $3 / 6$ containers. How much water would it take to fill 5 containers?
9) It takes $3 / 4$ spoons of chocolate syrup to make $2 / 5$ of a gallon of chocolate milk. How many spoons of syrup would it take to make 1 gallon of chocolate milk?
10) It takes $2 \frac{1}{2}$ yards of thread to make $\frac{2}{6}$ of a sock. How many yards of thread will it take to make an entire sock?

## Solve each problem. Answer as a mixed number (if possible).

1) A water faucet leaked $23 / 5$ liters of water over the course of $2 / 5$ hours. How many liters would it have leaked after 9 hours?
2) A bike tire was $3 / 5$ full. It took a small air compressor $2 / 6$ seconds to fill it up. How long would it have taken to fill an empty tire?
3) A bag with $2 \frac{1}{3}$ quarts of peanuts can make $3 \frac{1}{5}$ jars of peanut butter. How many quarts of peanuts would you need to make 3 jars?
4) A carpenter goes through $2 \frac{2}{6}$ boxes of nails finishing $2 \frac{1}{2}$ rooves. How much would he use finishing 4 rooves?
5) A container with $2 \frac{1}{3}$ gallons of weed killer can spray $3 \frac{1}{2}$ lawns. How many gallons would it take to spray 3 lawns?
6) A cookie recipe called for $2 \frac{1}{4}$ cups of sugar for every $2 \frac{1}{3}$ cups of flour. If you made a batch of cookies using 5 cup of flour, how many cups of sugar would you need?
7) A machine made $3 / 4$ pencils in $4 / 5$ of a minute. It made pencils at a rate of how many per minute?
8) It takes $2 \frac{5}{6}$ gallons of water to fill up $3 / 6$ containers. How much water would it take to fill 5 containers?
9) It takes $3 / 4$ spoons of chocolate syrup to make $2 / 5$ of a gallon of chocolate milk. How many spoons of syrup would it take to make 1 gallon of chocolate milk?
10) It takes $2 \frac{1}{2}$ yards of thread to make $\frac{2}{6}$ of a sock. How many yards of thread will it take to make an entire sock?

Answers

1. $\frac{9^{45} / 60}{3^{11} / 18}$| $3^{9} / 48$ |
| ---: |
| 3. $\frac{3^{22} / 30}{2^{0} / 2}$ |
| 5. |
2. 

$4^{23} / 28$
7. $\qquad$
8. $\qquad$
9. $\qquad$
10. $\qquad$

## Solve each problem. Answer as a mixed number (if possible).

Answers

| $9^{3} / 8$ | $2^{9} / 48$ | $3^{11} / 18$ | $4^{1 / 16}$ | $7^{2} / 4$ |
| :---: | :---: | :---: | :---: | :---: |
| $2 / 21$ | $9^{45} / 60$ | $4^{30} / 120$ | $3^{22} / 30$ | $4^{23} / 28$ |

1) A water faucet leaked $23 / 5$ liters of water over the course of $2 / 5$ hours. How many liters would it have leaked after 9 hours?
2) A bike tire was $3 / 5$ full. It took a small air compressor $2 \frac{1}{6}$ seconds to fill it up. How long would it have taken to fill an empty tire?
3) A bag with $2 \frac{1}{3}$ quarts of peanuts can make $3 \frac{1}{5}$ jars of peanut butter. How many quarts of peanuts would you need to make 3 jars?
4) A carpenter goes through $2 \frac{2}{6}$ boxes of nails finishing $2 \frac{1}{2}$ rooves. How much would he use finishing 4 rooves?
5) A container with $2 \frac{1}{3}$ gallons of weed killer can spray $3 \frac{1}{2}$ lawns. How many gallons would it take to spray 3 lawns?
6) A cookie recipe called for $2 \frac{1}{4}$ cups of sugar for every $2 \frac{1}{3}$ cups of flour. If you made a batch of cookies using 5 cup of flour, how many cups of sugar would you need?
7) A machine made $3 / 4$ pencils in $4 / 5$ of a minute. It made pencils at a rate of how many per minute?
8) It takes $2 \frac{5}{6}$ gallons of water to fill up $3 / 6$ containers. How much water would it take to fill 5 containers?
9) It takes $3 / 4$ spoons of chocolate syrup to make $2 / 5$ of a gallon of chocolate milk. How many spoons of syrup would it take to make 1 gallon of chocolate milk?
10) It takes $2 \frac{1}{2}$ yards of thread to make $\frac{2}{6}$ of a sock. How many yards of thread will it take to make an entire sock?
2. $\qquad$
3. $\qquad$
4. $\qquad$
5. $\qquad$
6. $\qquad$
7. $\qquad$
8. $\qquad$
9. $\qquad$
10. $\qquad$
11. $\qquad$
12. 

Solve each problem. Answer as a mixed number (if possible).
Answers

1) A container with $3 \frac{1}{3}$ gallons of weed killer can spray $3 / 4$ lawns. How many gallons would
it take to spray 7 lawns?
2) A cookie recipe called for $3 \frac{1}{2}$ cups of sugar for every $3 \frac{1}{2}$ cups of flour. If you made a batch of cookies using 4 cup of flour, how many cups of sugar would you need?
3) A machine made $31 / 6$ pencils in $2 / 3$ of a minute. It made pencils at a rate of how many per minute?
4) It takes $2 \frac{1}{2}$ spoons of chocolate syrup to make $\frac{1}{2}$ of a gallon of chocolate milk. How many spoons of syrup would it take to make 1 gallon of chocolate milk?
5) A water faucet leaked $2 \frac{3}{4}$ liters of water every $1 / 2$ of an hour. It leaked at a rate of how many liters per hour?
1. 
2. $\qquad$
3. $\qquad$
4. $\qquad$
5. $\qquad$
6. $\qquad$
7. $\qquad$
8. $\qquad$
9. $\qquad$
10. $\qquad$
6) A printer cartridge with $2 \frac{5}{6}$ milliliters of ink will print off $2 / 4$ of a box of paper. How many milliliters of ink will it take to print an entire box?
7) A bike tire was $2 / 3$ full. It took a small air compressor $3 / 6$ seconds to fill it up. How long would it have taken to fill an empty tire?
8) A carpenter goes through $3 / 3$ boxes of nails finishing $3 / 6$ of a roof. How much would he use finishing the entire roof?
9) A chef had to fill up $24 / 6$ containers with mashed potatoes. He ended up using $2 \frac{1}{2}$ pounds of mashed potatoes. How many pounds would he use if he had to fill up 6 containers?
10) It takes $3 \frac{3}{6}$ gallons of water to fill up $3 / \frac{4}{6}$ containers. How much water would it take to fill 9 containers?

## Solve each problem. Answer as a mixed number (if possible).

1) A container with $3 \frac{1}{3}$ gallons of weed killer can spray $3 / 4$ lawns. How many gallons would it take to spray 7 lawns?
2) A cookie recipe called for $3 \frac{1}{2}$ cups of sugar for every $3 \frac{1}{2}$ cups of flour. If you made a batch of cookies using 4 cup of flour, how many cups of sugar would you need?
3) A machine made $3 / 6$ pencils in $2 / 3$ of a minute. It made pencils at a rate of how many per minute?
4) It takes $2 \frac{1}{2}$ spoons of chocolate syrup to make $1 / 2$ of a gallon of chocolate milk. How many spoons of syrup would it take to make 1 gallon of chocolate milk?
5) A water faucet leaked $2 \frac{3}{4}$ liters of water every $1 / 2$ of an hour. It leaked at a rate of how many liters per hour?
6) A printer cartridge with $2 \frac{5}{6}$ milliliters of ink will print off $2 / 4$ of a box of paper. How many milliliters of ink will it take to print an entire box?
7) A bike tire was $\frac{2}{3}$ full. It took a small air compressor $3 / 6$ seconds to fill it up. How long would it have taken to fill an empty tire?
8) A carpenter goes through $3 / 3$ boxes of nails finishing $3 / 6$ of a roof. How much would he use finishing the entire roof?
9) A chef had to fill up $2 \frac{4}{6}$ containers with mashed potatoes. He ended up using $2 \frac{1}{2}$ pounds of mashed potatoes. How many pounds would he use if he had to fill up 6 containers?
10) It takes $3 \frac{3}{6}$ gallons of water to fill up $3 / \frac{4}{6}$ containers. How much water would it take to fill 9 containers?

## Solve each problem. Answer as a mixed number (if possible).

| $5^{8} / 12$ | $4 / 14$ | $7^{3} / 9$ | $5^{20} / 32$ | $7^{7} / 39$ |
| :--- | :---: | :---: | :---: | :---: |
| $4^{9} / 12$ | $8^{78} / 132$ | $5^{2} / 4$ | $5^{0} / 2$ | $4^{9} / 12$ |

1) A container with $3 / 3$ gallons of weed killer can spray $3 / 4$ lawns. How many gallons would it take to spray 7 lawns?
2) A cookie recipe called for $3 \frac{1}{2}$ cups of sugar for every $3 / 2$ cups of flour. If you made a batch of cookies using 4 cup of flour, how many cups of sugar would you need?
3) A machine made $3 / 6$ pencils in $2 / 3$ of a minute. It made pencils at a rate of how many per minute?
4) It takes $2 \frac{1}{2}$ spoons of chocolate syrup to make $1 / 2$ of a gallon of chocolate milk. How many spoons of syrup would it take to make 1 gallon of chocolate milk?
5) A water faucet leaked $2 \frac{3}{4}$ liters of water every $1 / 2$ of an hour. It leaked at a rate of how many liters per hour?
6) A printer cartridge with $2 \frac{5}{6}$ milliliters of ink will print off $2 / 4$ of a box of paper. How many milliliters of ink will it take to print an entire box?
7) A bike tire was $2 / 3$ full. It took a small air compressor $3 / 6$ seconds to fill it up. How long would it have taken to fill an empty tire?
8) A carpenter goes through $3 / 3$ boxes of nails finishing $3 / 6$ of a roof. How much would he use finishing the entire roof?
9) A chef had to fill up $2 \frac{4}{6}$ containers with mashed potatoes. He ended up using $2 \frac{1}{2}$ pounds of mashed potatoes. How many pounds would he use if he had to fill up 6 containers?
10) It takes $3 \frac{3}{6}$ gallons of water to fill up $3 / 6$ containers. How much water would it take to fill 9 containers?
2. $\qquad$
3. $\qquad$
4. $\qquad$
5. $\qquad$
6. $\qquad$
7. $\qquad$
8. $\qquad$
9. $\qquad$
10. $\qquad$

## Solve each problem. Answer as a mixed number (if possible).

Answers

1) It takes $2 \frac{1}{2}$ spoons of chocolate syrup to make $2 \frac{1}{2}$ gallons of chocolate milk. How many spoons of syrup would it take to make 7 gallons of chocolate milk?
2) A printer cartridge with $2 \frac{1}{2}$ milliliters of ink will print off $\frac{1}{3}$ of a box of paper. How many milliliters of ink will it take to print an entire box?
3) A cookie recipe called for $2 / 3$ cups of sugar for every $\frac{2}{3}$ cup of flour. If you made a batch of cookies using 1 cup of flour, how many cups of sugar would you need?
4) A bag with $3 \frac{1}{3}$ ounces of peanuts can make $4 / 5$ of a jar of peanut butter. It can make one full jar with how many ounces of peanuts?
5) A carpenter goes through $3 / 3$ boxes of nails finishing $3 \frac{1}{6}$ rooves. How much would he use finishing 3 rooves?
6) A tire shop had to fill $3 \frac{1}{3}$ tires with air. It took a small air compressor $3 \frac{1}{4}$ seconds to fill them up. How long would it take to fill 2 tires?
7) A container with $3 / 4$ liters of weed killer can spray $2 / 5$ of a lawn. How many liters would it take to spray 1 entire lawn?
8) A water faucet leaked $3 / 5$ liters of water over the course of $3 / 5$ hours. How many liters would it have leaked after 5 hours?
9) A chef had to fill up $3 / 5$ of a container with mashed potatoes. He ended up using $3 \frac{1}{2}$ pounds of mashed potatoes. How many pounds would he use if he had to fill up the entire container?
10) A bucket of water was $3 / 6$ full, but it still had $2 \frac{1}{2}$ gallons of water in it. How much water would be in one fully filled bucket?

## Solve each problem. Answer as a mixed number (if possible).

1) It takes $2 \frac{1}{2}$ spoons of chocolate syrup to make $2 \frac{1}{2}$ gallons of chocolate milk. How many spoons of syrup would it take to make 7 gallons of chocolate milk?
2) A printer cartridge with $2 \frac{1}{2}$ milliliters of ink will print off $1 / 3$ of a box of paper. How many milliliters of ink will it take to print an entire box?
3) A cookie recipe called for $2 \frac{2}{3}$ cups of sugar for every $\frac{2}{3}$ cup of flour. If you made a batch of cookies using 1 cup of flour, how many cups of sugar would you need?
4) A bag with $3 / 3$ ounces of peanuts can make $4 / 5$ of a jar of peanut butter. It can make one full jar with how many ounces of peanuts?
5) A carpenter goes through $3 / \frac{2}{3}$ boxes of nails finishing $3 \frac{1}{6}$ rooves. How much would he use finishing 3 rooves?
6) A tire shop had to fill $3 \frac{1}{3}$ tires with air. It took a small air compressor $3 \frac{1}{4}$ seconds to fill them up. How long would it take to fill 2 tires?
7) A container with $3 / 4$ liters of weed killer can spray $2 / 5$ of a lawn. How many liters would it take to spray 1 entire lawn?
8) A water faucet leaked $3 / 5$ liters of water over the course of $3 / 5$ hours. How many liters would it have leaked after 5 hours?
9) A chef had to fill up $3 / 5$ of a container with mashed potatoes. He ended up using $31 / 2$ pounds of mashed potatoes. How many pounds would he use if he had to fill up the entire container?
10) A bucket of water was $3 / 6$ full, but it still had $2 \frac{1}{2}$ gallons of water in it. How much water would be in one fully filled bucket?

## Answers

1. 
2. 

$\qquad$
$\qquad$ $71 / 2$
3.

4. $\qquad$
5. $\qquad$
6.

7.

8.

9.


## Solve each problem. Answer as a mixed number (if possible).

Answers

| $4 / 6$ | $5^{50} / 85$ | $4^{2} / 12$ | $8 \frac{1}{8}$ | $3^{27} / 57$ |
| :---: | :---: | :---: | :---: | :---: |
| $5 / 6$ | $5 \frac{0}{6}$ | $138 / 40$ | $7 / 2$ | $7^{0} / 10$ |

1) It takes $2 \frac{1}{2}$ spoons of chocolate syrup to make $2 \frac{1}{2}$ gallons of chocolate milk. How many spoons of syrup would it take to make 7 gallons of chocolate milk?
2) A printer cartridge with $2 \frac{1}{2}$ milliliters of ink will print off $1 / 3$ of a box of paper. How many milliliters of ink will it take to print an entire box?
3) A cookie recipe called for $2 \frac{2}{3}$ cups of sugar for every $\frac{2}{3}$ cup of flour. If you made a batch of cookies using 1 cup of flour, how many cups of sugar would you need?
4) A bag with $3 / 3$ ounces of peanuts can make $4 / 5$ of a jar of peanut butter. It can make one full jar with how many ounces of peanuts?
5) A carpenter goes through $3 / 3$ boxes of nails finishing $3 \frac{1}{6}$ rooves. How much would he use finishing 3 rooves?
6) A tire shop had to fill $3 \frac{1}{3}$ tires with air. It took a small air compressor $3 \frac{1}{4}$ seconds to fill them up. How long would it take to fill 2 tires?
7) A container with $3 / 4$ liters of weed killer can spray $2 / 5$ of a lawn. How many liters would it take to spray 1 entire lawn?
8) A water faucet leaked $3 / 5$ liters of water over the course of $3 / 5$ hours. How many liters would it have leaked after 5 hours?
9) A chef had to fill up $3 / 5$ of a container with mashed potatoes. He ended up using $31 / 2$ pounds of mashed potatoes. How many pounds would he use if he had to fill up the entire container?
10) A bucket of water was $3 / 6$ full, but it still had $2 \frac{1}{2}$ gallons of water in it. How much water would be in one fully filled bucket?
2. $\qquad$
3. 
4. $\qquad$
5. $\qquad$
6. $\qquad$
7. $\qquad$
8. $\qquad$
9. $\qquad$
10. $\qquad$
11. $\qquad$
$\qquad$
.
 $\qquad$

## Solve each problem. Answer as a mixed number (if possible).

Answers

1) A printer cartridge with $3 / 6$ milliliters of ink will print off $4 / 6$ of a box of paper. How many milliliters of ink will it take to print an entire box?
2) It takes $2 \frac{1}{6}$ spoons of chocolate syrup to make $1 / 2$ of a gallon of chocolate milk. How many spoons of syrup would it take to make 1 gallon of chocolate milk?
3) A tire shop had to fill $3 \frac{2}{3}$ tires with air. It took a small air compressor $3 \frac{1}{2}$ seconds to fill them up. How long would it take to fill 6 tires?
4) A container with $3 / 5$ gallons of weed killer can spray $2 / \frac{1}{6}$ lawns. How many gallons would it take to spray 8 lawns?
5) A machine made $2 \frac{3}{6}$ pencils in $1 / 4$ of a minute. It made pencils at a rate of how many per minute?
1. 
2. $\qquad$
3. $\qquad$
4. $\qquad$
5. $\qquad$
6. $\qquad$
7. $\qquad$
8. $\qquad$
9. $\qquad$
10. $\qquad$
6) A water faucet leaked $3 / 5$ liters of water over the course of $2 \frac{1}{5}$ hours. How many liters would it have leaked after 3 hours?
7) A bucket of water was $5 / 6$ full, but it still had $2 \frac{1}{3}$ gallons of water in it. How much water would be in one fully filled bucket?
8) A chef had to fill up $2 \frac{1}{2}$ containers with mashed potatoes. He ended up using $2 \frac{2}{5}$ pounds of mashed potatoes. How many pounds would he use if he had to fill up 7 containers?
9) A bag with $3 \frac{1}{2}$ quarts of peanuts can make $3 \frac{1}{3}$ jars of peanut butter. How many quarts of peanuts would you need to make 3 jars?
10) A cookie recipe called for $3 / 2$ cups of sugar for every $1 / 2$ cup of flour. If you made a batch of cookies using 1 cup of flour, how many cups of sugar would you need?

## Solve each problem. Answer as a mixed number (if possible).

1) A printer cartridge with $3 / 6$ milliliters of ink will print off $4 / 6$ of a box of paper. How many milliliters of ink will it take to print an entire box?
2) It takes $2 \frac{1}{6}$ spoons of chocolate syrup to make $1 / 2$ of a gallon of chocolate milk. How many spoons of syrup would it take to make 1 gallon of chocolate milk?
3) A tire shop had to fill $3 / 3$ tires with air. It took a small air compressor $3 \frac{1}{2}$ seconds to fill them up. How long would it take to fill 6 tires?
4) A container with $3 \frac{1}{5}$ gallons of weed killer can spray $2 \frac{2}{6}$ lawns. How many gallons would it take to spray 8 lawns?
5) A machine made $2 \frac{3}{6}$ pencils in $1 / 4$ of a minute. It made pencils at a rate of how many per minute?
6) A water faucet leaked $3 / 5$ liters of water over the course of $2 \frac{1}{5}$ hours. How many liters would it have leaked after 3 hours?
7) A bucket of water was $\frac{5}{6}$ full, but it still had $2 \frac{1}{3}$ gallons of water in it. How much water would be in one fully filled bucket?
8) A chef had to fill up $2 \frac{1}{2}$ containers with mashed potatoes. He ended up using $2 \frac{2}{5}$ pounds of mashed potatoes. How many pounds would he use if he had to fill up 7 containers?
9) A bag with $3 \frac{1}{2}$ quarts of peanuts can make $3 \frac{1}{3}$ jars of peanut butter. How many quarts of peanuts would you need to make 3 jars?
10) A cookie recipe called for $3 \frac{1}{2}$ cups of sugar for every $1 / 2$ cup of flour. If you made a batch of cookies using 1 cup of flour, how many cups of sugar would you need?

## Using Units Rates with Fractions

## Solve each problem. Answer as a mixed number (if possible).

Answers

| $212 / 15$ | $10^{68} / 70$ | $5^{10} / 55$ | $4 \frac{4}{6}$ | $7^{0} / 2$ |
| :---: | :---: | :---: | :---: | :---: |
| $10 / 6$ | $3^{3} / 20$ | $5^{16} / 22$ | $6^{18} / 25$ | $5^{12} / 24$ |

1) A printer cartridge with $3 / 6$ milliliters of ink will print off $4 / 6$ of a box of paper. How many milliliters of ink will it take to print an entire box?
2) It takes $2 \frac{2}{6}$ spoons of chocolate syrup to make $1 / 2$ of a gallon of chocolate milk. How many spoons of syrup would it take to make 1 gallon of chocolate milk?
3) A tire shop had to fill $3 \frac{2}{3}$ tires with air. It took a small air compressor $3 \frac{1}{2}$ seconds to fill them up. How long would it take to fill 6 tires?
4) A container with $3 / 5$ gallons of weed killer can spray $2 \frac{2}{6}$ lawns. How many gallons would it take to spray 8 lawns?
5) A machine made $2 \frac{3}{6}$ pencils in $1 / 4$ of a minute. It made pencils at a rate of how many per minute?
2. $\qquad$
3. $\qquad$
4. $\qquad$
5. $\qquad$
6. $\qquad$
7. $\qquad$
8. $\qquad$
9. $\qquad$
10. $\qquad$
6) A water faucet leaked $3 / 5$ liters of water over the course of $2 \frac{1}{5}$ hours. How many liters would it have leaked after 3 hours?
7) A bucket of water was $\frac{5}{6}$ full, but it still had $2 \frac{1}{3}$ gallons of water in it. How much water would be in one fully filled bucket?
8) A chef had to fill up $2 \frac{1}{2}$ containers with mashed potatoes. He ended up using $2 \frac{2}{5}$ pounds of mashed potatoes. How many pounds would he use if he had to fill up 7 containers?
9) A bag with $3 \frac{1}{2}$ quarts of peanuts can make $3 \frac{1}{3}$ jars of peanut butter. How many quarts of peanuts would you need to make 3 jars?
10) A cookie recipe called for $3 \frac{1}{2}$ cups of sugar for every $1 / 2$ cup of flour. If you made a batch of cookies using 1 cup of flour, how many cups of sugar would you need?

Solve each problem. Answer as a mixed number (if possible).
Answers

1) It takes $2 \frac{3}{5}$ spoons of chocolate syrup to make $2 \frac{1}{3}$ gallons of chocolate milk. How many
spoons of syrup would it take to make 8 gallons of chocolate milk?
2) A carpenter goes through $3 / 3$ boxes of nails finishing $1 / 2$ of a roof. How much would he use finishing the entire roof?
3) It takes $3 \frac{2}{4}$ yards of thread to make $2 / 6$ of a sock. How many yards of thread will it take to make an entire sock?
4) It takes $3 \frac{1}{6}$ gallons of water to fill up $3 / 3$ containers. How much water would it take to fill 2 containers?
5) A cookie recipe called for $3 / 5$ cups of sugar for every $3 / 5$ cup of flour. If you made a batch of cookies using 1 cup of flour, how many cups of sugar would you need?
6) A container with $3 / \frac{1}{5}$ gallons of weed killer can spray $3 \frac{1}{2}$ lawns. How many gallons would it take to spray 8 lawns?
7) A printer cartridge with $3 \frac{1}{2}$ milliliters of ink will print off $4 / 5$ of a box of paper. How many milliliters of ink will it take to print an entire box?
8) A bag with $3 \frac{1}{4}$ ounces of peanuts can make $\frac{3}{6}$ of a jar of peanut butter. It can make one full jar with how many ounces of peanuts?
9) A chef had to fill up $2 \frac{1}{4}$ containers with mashed potatoes. He ended up using $2 \frac{3}{4}$ pounds of mashed potatoes. How many pounds would he use if he had to fill up 7 containers?
10) A bike tire was $4 / 5$ full. It took a small air compressor $2 \frac{1}{4}$ seconds to fill it up. How long would it have taken to fill an empty tire?
1. 
2. $\qquad$
3. $\qquad$
4. $\qquad$
5. $\qquad$
6. $\qquad$
7. $\qquad$
8. $\qquad$
9. $\qquad$
10. $\qquad$

## Using Units Rates with Fractions

Name: Answer Key
Solve each problem. Answer as a mixed number (if possible).

1) It takes $2 \frac{3}{5}$ spoons of chocolate syrup to make $2 \frac{1}{3}$ gallons of chocolate milk. How many spoons of syrup would it take to make 8 gallons of chocolate milk?
2) A carpenter goes through $3 / 3$ boxes of nails finishing $1 / 2$ of a roof. How much would he use finishing the entire roof?
3) It takes $3 \frac{2}{4}$ yards of thread to make $2 / 6$ of a sock. How many yards of thread will it take to make an entire sock?
4) It takes $3 \frac{1}{6}$ gallons of water to fill up $3 \frac{1}{3}$ containers. How much water would it take to fill 2 containers?
5) A cookie recipe called for $3 / 5$ cups of sugar for every $3 / 5$ cup of flour. If you made a batch of cookies using 1 cup of flour, how many cups of sugar would you need?
6) A container with $3 \frac{1}{5}$ gallons of weed killer can spray $3 \frac{1}{2}$ lawns. How many gallons would it take to spray 8 lawns?
7) A printer cartridge with $3 \frac{1}{2}$ milliliters of ink will print off $4 / 5$ of a box of paper. How many milliliters of ink will it take to print an entire box?
8) A bag with $3 \frac{1}{4}$ ounces of peanuts can make $\frac{3}{6}$ of a jar of peanut butter. It can make one full jar with how many ounces of peanuts?
9) A chef had to fill up $2 \frac{1}{4}$ containers with mashed potatoes. He ended up using $2 \frac{3}{4}$ pounds of mashed potatoes. How many pounds would he use if he had to fill up 7 containers?
10) A bike tire was $4 / 5$ full. It took a small air compressor $2 \frac{1}{4}$ seconds to fill it up. How long would it have taken to fill an empty tire?

Answers
1.
$8^{32} / 35$
2. $\qquad$
3.

4.
$15 / 60$
5.

6.
$7^{11 / 35}$
7. $\qquad$
8. $\qquad$
9.

10. $\qquad$

## Solve each problem. Answer as a mixed number (if possible).

Answers

| $8^{32} / 35$ | $8^{20} / 36$ | $1^{54} / 60$ | $4^{3} / 8$ | $6^{0} / 15$ |
| :---: | :---: | :---: | :---: | :---: |
| $213 / 16$ | $6^{2} / 3$ | $10^{4} / 8$ | $6^{6} / 12$ | $7^{11} / 35$ |

1) It takes $2 \frac{3}{5}$ spoons of chocolate syrup to make $2 \frac{1}{3}$ gallons of chocolate milk. How many spoons of syrup would it take to make 8 gallons of chocolate milk?
2) A carpenter goes through $3 / 3$ boxes of nails finishing $\frac{1}{2}$ of a roof. How much would he use finishing the entire roof?
3) It takes $3 \frac{2}{4}$ yards of thread to make $2 / 6$ of a sock. How many yards of thread will it take to make an entire sock?
4) It takes $3 \frac{1}{6}$ gallons of water to fill up $3 \frac{1}{3}$ containers. How much water would it take to fill 2 containers?
5) A cookie recipe called for $3 / 5$ cups of sugar for every $3 / 5$ cup of flour. If you made a batch of cookies using 1 cup of flour, how many cups of sugar would you need?
6) A container with $3 / 5$ gallons of weed killer can spray $3 / 2$ lawns. How many gallons would it take to spray 8 lawns?
7) A printer cartridge with $3 \frac{1}{2}$ milliliters of ink will print off $4 / 5$ of a box of paper. How many milliliters of ink will it take to print an entire box?
8) A bag with $3 / 4$ ounces of peanuts can make $3 / 6$ of a jar of peanut butter. It can make one full jar with how many ounces of peanuts?
9) A chef had to fill up $2 \frac{1}{4}$ containers with mashed potatoes. He ended up using $2 \frac{3}{4}$ pounds of mashed potatoes. How many pounds would he use if he had to fill up 7 containers?
10) A bike tire was $4 / 5$ full. It took a small air compressor $2 \frac{1}{4}$ seconds to fill it up. How long would it have taken to fill an empty tire?
2. $\qquad$
3. $\qquad$
4. $\qquad$
5. $\qquad$
6. $\qquad$
7. $\qquad$
8. $\qquad$
9. $\qquad$
10. $\qquad$

Solve each problem. Answer as a mixed number (if possible).
Answers

1) It takes $3 / 4$ yards of thread to make $4 / 5$ of a sock. How many yards of thread will it take to make an entire sock?
2) A chef had to fill up $2 / 4$ of a container with mashed potatoes. He ended up using $3 / 6$ pounds of mashed potatoes. How many pounds would he use if he had to fill up the entire container?
3) A carpenter goes through $3 / 6$ boxes of nails finishing $3 / 4$ of a roof. How much would he use finishing the entire roof?
4) A bag with $2 \frac{1}{6}$ ounces of peanuts can make $\frac{1}{3}$ of a jar of peanut butter. It can make one full jar with how many ounces of peanuts?
5) A bike tire was $\frac{2}{4}$ full. It took a small air compressor $3 \frac{1}{2}$ seconds to fill it up. How long would it have taken to fill an empty tire?
6) A printer cartridge with $3 / 3$ milliliters of ink will print off $3 / 6$ reams of paper. How many milliliters of ink will it take to print 2 reams?
7) A container with $3 / 5$ gallons of weed killer can spray $2 \frac{2}{3}$ lawns. How many gallons would it take to spray 8 lawns?
8) A water faucet leaked $2 \frac{1}{4}$ liters of water over the course of $2 \frac{1}{2}$ hours. How many liters would it have leaked after 2 hours?
9) A machine made $3 / 6$ pencils in $1 / 2$ of a minute. It made pencils at a rate of how many per minute?
10) It takes $3 / 6$ spoons of chocolate syrup to make $2 \frac{3}{6}$ gallons of chocolate milk. How many spoons of syrup would it take to make 2 gallons of chocolate milk?

## Solve each problem. Answer as a mixed number (if possible).

1) It takes $3 / 4$ yards of thread to make $4 / 5$ of a sock. How many yards of thread will it take to make an entire sock?
2) A chef had to fill up $2 / 4$ of a container with mashed potatoes. He ended up using $3 / 6$ pounds of mashed potatoes. How many pounds would he use if he had to fill up the entire container?
3) A carpenter goes through $3 / 6$ boxes of nails finishing $3 / 4$ of a roof. How much would he use finishing the entire roof?
4) A bag with $2 \frac{1}{6}$ ounces of peanuts can make $\frac{1}{3}$ of a jar of peanut butter. It can make one full jar with how many ounces of peanuts?
5) A bike tire was $\frac{2}{4}$ full. It took a small air compressor $3 \frac{1}{2}$ seconds to fill it up. How long would it have taken to fill an empty tire?
6) A printer cartridge with $3 / 3$ milliliters of ink will print off $3 / 6$ reams of paper. How many milliliters of ink will it take to print 2 reams?
7) A container with $3 / 5$ gallons of weed killer can spray $2 \frac{2}{3}$ lawns. How many gallons would it take to spray 8 lawns?
8) A water faucet leaked $2 \frac{1}{4}$ liters of water over the course of $2 \frac{1}{2}$ hours. How many liters would it have leaked after 2 hours?
9) A machine made $3 / 6$ pencils in $1 / 2$ of a minute. It made pencils at a rate of how many per minute?
10) It takes $3 / 6$ spoons of chocolate syrup to make $2 \frac{3}{6}$ gallons of chocolate milk. How many spoons of syrup would it take to make 2 gallons of chocolate milk?

## Solve each problem. Answer as a mixed number (if possible).

| $2 \% / 63$ | $4^{4} / 18$ | $16 / 20$ | $4^{1} / 16$ | $7{ }^{0} / 6$ |
| :---: | :---: | :---: | :---: | :---: |
| $10^{8} / 40$ | $7 / 12$ | $6 \frac{3}{6}$ | $7^{0} / 4$ | $2^{84} / 90$ |

1) It takes $3 / 4$ yards of thread to make $4 / 5$ of a sock. How many yards of thread will it take to make an entire sock?
2) A chef had to fill up $2 / 4$ of a container with mashed potatoes. He ended up using $3 / 6$ pounds of mashed potatoes. How many pounds would he use if he had to fill up the entire container?
3) A carpenter goes through $3 / 6$ boxes of nails finishing $3 / 4$ of a roof. How much would he use finishing the entire roof?
4) A bag with $2 \frac{1}{6}$ ounces of peanuts can make $1 / 3$ of a jar of peanut butter. It can make one full jar with how many ounces of peanuts?
5) A bike tire was $2 / 4$ full. It took a small air compressor $3 / 2$ seconds to fill it up. How long would it have taken to fill an empty tire?
6) A printer cartridge with $3 / 3$ milliliters of ink will print off $3 \frac{3}{6}$ reams of paper. How many milliliters of ink will it take to print 2 reams?
7) A container with $3 / 5$ gallons of weed killer can spray $2 / 3$ lawns. How many gallons would it take to spray 8 lawns?
8) A water faucet leaked $2 \frac{1}{4}$ liters of water over the course of $2 \frac{1}{2}$ hours. How many liters would it have leaked after 2 hours?
9) A machine made $3 / 6$ pencils in $1 / 2$ of a minute. It made pencils at a rate of how many per minute?
10) It takes $3 \frac{4}{6}$ spoons of chocolate syrup to make $2 \frac{3}{6}$ gallons of chocolate milk. How many spoons of syrup would it take to make 2 gallons of chocolate milk?
2. $\qquad$
3. $\qquad$
4. $\qquad$
5. $\qquad$
6. $\qquad$
7. $\qquad$
8. $\qquad$
9. $\qquad$
10. $\qquad$
居mate

$$
\text { spoons of syrup would it take to make } 2 \text { gallons of chocolate milk? }
$$

Solve each problem. Answer as a mixed number (if possible).
Answers

1) A machine made $2 \frac{2}{4}$ pencils in $2 \frac{1}{4}$ minutes. How many pencils would the machine have
made after 2 minutes?
2) A water faucet leaked $3 / 6$ liters of water every $3 / 5$ of an hour. It leaked at a rate of how many liters per hour?
3) A container with $3 / 5$ liters of weed killer can spray $1 / 5$ of a lawn. How many liters would it take to spray 1 entire lawn?
4) A carpenter goes through $3 \frac{1}{2}$ boxes of nails finishing $2 \frac{2}{5}$ rooves. How much would he use finishing 6 rooves?
5) It takes $3 / 5$ kilometers of thread to make $3 \frac{1}{3}$ boxes of shirts. How many kilometers of thread will it take to make 7 boxes?
1. 
2. $\qquad$
3. $\qquad$
4. $\qquad$
5. $\qquad$
6. $\qquad$
7. $\qquad$
8. $\qquad$
9. $\qquad$
10. $\qquad$
6) A tire shop had to fill $3 / 5$ tires with air. It took a small air compressor $3 / 5$ seconds to fill them up. How long would it take to fill 7 tires?
7) It takes $3 / 5$ spoons of chocolate syrup to make $5 / 6$ of a gallon of chocolate milk. How many spoons of syrup would it take to make 1 gallon of chocolate milk?
8) A printer cartridge with $3 \frac{3}{4}$ milliliters of ink will print off $\frac{1}{3}$ of a box of paper. How many milliliters of ink will it take to print an entire box?
9) A bag with $2 \frac{2}{3}$ ounces of peanuts can make $1 / 2$ of a jar of peanut butter. It can make one full jar with how many ounces of peanuts?
10) A cookie recipe called for $2 \frac{1}{4}$ cups of sugar for every $2 \frac{1}{2}$ cups of flour. If you made a batch of cookies using 8 cup of flour, how many cups of sugar would you need?

## Solve each problem. Answer as a mixed number (if possible).

1) A machine made $2 \frac{2}{4}$ pencils in $2 \frac{1}{4}$ minutes. How many pencils would the machine have made after 2 minutes?
2) A water faucet leaked $3 / 6$ liters of water every $3 / 5$ of an hour. It leaked at a rate of how many liters per hour?
3) A container with $3 / 5$ liters of weed killer can spray $1 / 5$ of a lawn. How many liters would it take to spray 1 entire lawn?
4) A carpenter goes through $3 \frac{1}{2}$ boxes of nails finishing $2 \frac{2}{5}$ rooves. How much would he use finishing 6 rooves?
5) It takes $3 / 5$ kilometers of thread to make $3 \frac{1}{3}$ boxes of shirts. How many kilometers of thread will it take to make 7 boxes?
6) A tire shop had to fill $3 / 5$ tires with air. It took a small air compressor $3 / 5$ seconds to fill them up. How long would it take to fill 7 tires?
7) It takes $3 / 5$ spoons of chocolate syrup to make $5 / 6$ of a gallon of chocolate milk. How many spoons of syrup would it take to make 1 gallon of chocolate milk?
8) A printer cartridge with $3 \frac{3}{4}$ milliliters of ink will print off $\frac{1}{3}$ of a box of paper. How many milliliters of ink will it take to print an entire box?
9) A bag with $2 \frac{2}{3}$ ounces of peanuts can make $1 / 2$ of a jar of peanut butter. It can make one full jar with how many ounces of peanuts?
10) A cookie recipe called for $2 \frac{1}{4}$ cups of sugar for every $2 \frac{1}{2}$ cups of flour. If you made a batch of cookies using 8 cup of flour, how many cups of sugar would you need?

10. $\qquad$

Using Units Rates with Fractions
Solve each problem. Answer as a mixed number (if possible).

| $5^{10} / 18$ | $8^{18} / 24$ | $7^{28} / 50$ | $6^{60} / 95$ | $16^{0} / 5$ |
| :---: | :---: | :---: | :---: | :---: |
| $5 \frac{1}{3}$ | $28 / 36$ | $11 / 4$ | $4^{14} / 25$ | $7^{4} / 20$ |

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2. $\qquad$
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6. $\qquad$
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8. $\qquad$
9. $\qquad$
10. $\qquad$
