

Dividing Fractions Word Problems

Show your working out clearly.

Write your answers in their simplest forms.

Where appropriate, write your answers as mixed number fractions.

1. Natalie is baking cupcakes. Each cupcake needs $\frac{1}{2}$ a cup of sugar. How many cupcakes can she make if has $7\frac{1}{3}$ cups of sugar?

2. There were 15 people and $5\frac{1}{2}$ pies. Everyone decided that the fairest thing would be to share the pies out equally. What fraction of a pie does each person receive?

3. Rachel cuts a 30m skipping rope into pieces of $1\frac{3}{4}$ metres each. What is the maximum number of pieces Rachel can cut from the rope?

4. If the area of a square is $6\frac{1}{4}$ cm², how long is each side?

5. Stephen got a plant as a gift. His plant grows $1\frac{1}{2}$ cm every month. How long will it take for the plant to grow $5\frac{2}{5}$ cm?

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6. Nick is buying skirting board for his games room. His room is $4\frac{1}{2}$ m long. Each piece of skirting board is $\frac{2}{5}$ m long. How many whole pieces of skirting board does he need to cover the length of the games room?

7. The product of two numbers is 18. If one number is $8\frac{2}{5}$, find the other number.

8. If the area of a rectangle is 42cm^2 and its length is $\frac{2}{5}$ cm, what is its width?

Challenge Question

1. A book shelf is $3\frac{1}{2}$ m long. How many books can you fit on the shelf if each book is $3\frac{3}{4}$ cm thick?

2. A cinema with only one screen is open for $10\frac{1}{2}$ hours a day. If each film lasted $1\frac{3}{4}$ hours and there was a 15-minute break between each film, how many whole films could the cinema show?

Dividing Fractions Word Problems Answer

Show your working out clearly.

Write your answers in their simplest forms.

Where appropriate, write your answers as mixed number fractions.

1. Natalie is baking cupcakes. Each cupcake needs $\frac{1}{2}$ a cup of sugar. How many cupcakes can she make if has $7\frac{1}{3}$ cups of sugar?

14. She has $\frac{1}{3}$ of a cup of sugar left over.

2. There were 15 people and $5\frac{1}{2}$ pies. Everyone decided that the fairest thing would be to share the pies out equally. What fraction of a pie does each person receive?

$\frac{11}{30}$ each.

3. Rachel cuts a 30m skipping rope into pieces of $1\frac{3}{4}$ metres each. What is the maximum number of pieces Rachel can cut from the rope?

17 pieces. With $\frac{1}{4}$ m left over.

4. If the area of a square is $6\frac{1}{4}$ cm², how long is each side?

$2\frac{1}{2}$ cm.

5. Stephen got a plant as a gift. His plant grows $1\frac{1}{2}$ cm every month. How long will it take for the plant to grow $5\frac{2}{5}$ cm?

$3\frac{3}{5}$ months

6. Nick is buying skirting board for his games room. His room is $4\frac{1}{2}$ m long. Each piece of skirting board is $\frac{2}{5}$ m long. How many whole pieces of skirting board does he need to cover the length of the games room?

$11\frac{1}{4}$ pieces so 12 whole pieces.

7. The product of two numbers is 18. If one number is $8\frac{2}{5}$, find the other number.

$2\frac{1}{7}$

8. If the area of a rectangle is 42cm² and its length is $\frac{2}{5}$ cm, what is its width?

105cm

Challenge Question

1. A book shelf is $3\frac{1}{2}$ m long. How many books can you fit on the shelf if each book is $3\frac{3}{4}$ cm thick?

$93\frac{1}{3}$ so 93 books.

2. A cinema with only one screen is open for $10\frac{1}{2}$ hours a day. If each film lasted $1\frac{3}{4}$ hours and there was a 15-minute break between each film, how many whole films could the cinema show?

5 films.