




## Fantastic Fractions! Answers

| Question | Answer |  |  |
| :---: | :---: | :---: | :---: |
| $\star$ | Find the fractions of these numbers: |  |  |
|  | Find $\frac{2}{8}$ of $64=16$ | Find $\frac{6}{7}$ of $70=60$ | Find $\frac{3}{6}$ of $36=18$ |
|  | Find $\frac{2}{3}$ of $90=60$ | Find $\frac{4}{10}$ of $200=80$ | Find $\frac{1}{2}$ of $70=35$ |
|  | Find $\frac{3}{4}$ of $60=45$ | Find $\frac{2}{9}$ of $81=18$ |  |
| $t$ | Find the fractions of these numbers: |  |  |
|  | Find $\frac{2}{8}$ of $88=22$ | Find $\frac{6}{7}$ of $91=78$ | Find $\frac{3}{6}$ of $360=180$ |
|  | Find $\frac{2}{3}$ of $42=28$ | Find $\frac{4}{10}$ of $1000=400$ | Find $\frac{1}{12}$ of $168=14$ |
|  | Find $\frac{3}{4}$ of $500=375$ | Find $\frac{2}{9}$ of $126=28$ | Find $\frac{3}{9}$ of $99=33$ |
|  | Find $\frac{2}{6}$ of $90=30$ |  |  |
| $t \rightarrow t$ | Find the fractions of these numbers: |  |  |
|  | Find $\frac{2}{8}$ of $888=222$ | Find $\frac{6}{7}$ of $175=150$ | Find $\frac{3}{6}$ of $3600=1800$ |
|  | Find $\frac{2}{3}$ of $195=130$ | Find $\frac{4}{10}$ of $10000=4000$ | Find $\frac{2}{12}$ of $168=28$ |
|  | Find $\frac{3}{4}$ of $104=78$ | Find $\frac{5}{9}$ of $126=70$ | Find $\frac{4}{9}$ of $99=44$ |
|  | Find $\frac{2}{6}$ of $504=168$ |  |  |

## Juice

I can solve scaling problems.


How do you like your juice? Weak or strong?
We are going to make the perfect juice by investigating different combinations of concentrate and water.

First, we will try $\frac{1}{4}$ concentrate and $\frac{3}{4}$ water.

1) Pour 100 ml of concentrate into your cup. How much water do you need to add?
$\qquad$ ml

How much water would you need if you used 550 ml of concentrate?
$\qquad$ ml
Is $\frac{1}{4}$ concentrate and $\frac{3}{4}$ water too strong or too weak?
2) Make and try these combinations.

| Combination | Amount of Concentrate | Amount of Water | Rating |
| :---: | :---: | :---: | :---: |
| $\frac{1}{5}$ concentrate and $\frac{4}{5}$ water | 125 ml |  | $\hat{\Delta} \hat{y} \hat{y}$ |
| $\frac{1}{6}$ concentrate and $\frac{5}{6}$ water | 72 ml |  | $\hat{y} \hat{y} \hat{y}$ |
| $\frac{1}{7}$ concentrate and $\frac{6}{7}$ water | 84 ml |  | $\hat{\sim} \hat{y} \hat{y}$ |

3) Choose your favourite combination of concentrate and water.

If the recipe was for two people, how much concentrate and water would you need for:
a) 1 person $\qquad$ ml
b) 4 people $\qquad$ ml
c) 10 people $\qquad$ ml


## Juice Answers

| Question | Answer |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 1. | Pour 100 ml of concentrate into your cup. How much water do you need to add? |  |  |  |
|  | 300 ml <br> How much water would you need if you used 550 ml of concentrate? 1650 ml |  |  |  |
| 2. | Make and try these combinations. |  |  |  |
|  | Combination | Amount of Concentrate | Amount of Water | Rating |
|  | $\frac{1}{5}$ concentrate and $\frac{4}{5}$ water | 125ml | 500 ml | $\cdots \pi$ |
|  | $\frac{1}{6}$ concentrate and $\frac{5}{6}$ water | 72 ml | 360 ml | $\cdots \pi$ |
|  | $\frac{1}{7}$ concentrate and $\frac{6}{7}$ water | 84 ml | 504ml | $\cdots \pi$ |
| 3. | Choose your favourite combination of concentrate and water. |  |  |  |
|  | Multiple answers possible. |  |  |  |

## Juice

I can solve scaling problems.


How do you like your juice? Weak or strong?
We are going to make the perfect juice by investigating different combinations of concentrate and water.

First, we will try $\frac{1}{5}$ concentrate and $\frac{4}{5}$ water.

1) Pour 110 ml of concentrate into your cup. How much water do you need to add?
$\qquad$ ml

How much water would you need if you used 552 ml of concentrate?
$\qquad$ ml

Is $\frac{1}{5}$ concentrate and $\frac{4}{5}$ water too strong or too weak?
2) Make and try these combinations.

| Combination | Amount of Concentrate | Amount of Water | Rating |
| :---: | :---: | :---: | :---: |
| $\frac{2}{6}$ concentrate and $\frac{4}{6}$ water | 120ml |  | $\hat{y} \hat{y} \hat{y}$ |
| $\frac{2}{8}$ concentrate and $\frac{6}{8}$ water | 320 ml |  | $\hat{y} \hat{y} \hat{y}$ |
| $\frac{3}{7}$ concentrate and $\frac{4}{7}$ water |  | 560 ml | $\hat{y} \hat{y} \hat{y}$ |

3) Choose your favourite combination of concentrate and water.

If the recipe was for four people, how much concentrate and water would you need for:
a) 8 people $\qquad$ ml
b) 1 person $\qquad$ ml
c) 25 people $\qquad$ ml


## Juice Answers

| Question | Answer |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 1. | Pour 110 ml of concentrate into your cup. How much water do you need to add? |  |  |  |
|  | 440 ml <br> How much water would you need if you used 552 ml of concentrate? $2208 \mathrm{ml}$ |  |  |  |
| 2. | Make and try these combinations. |  |  |  |
|  | Combination | Amount of Concentrate | Amount of Water | Rating |
|  | $\frac{2}{6}$ concentrate and $\frac{4}{6}$ water | 120ml | 240 ml | $\hat{H} \hat{y} \hat{y}$ |
|  | $\frac{2}{8}$ concentrate and $\frac{6}{8}$ water | 320ml | 960 ml | $\hat{H} \hat{H} \hat{\pi}$ |
|  | $\frac{3}{7}$ concentrate and $\frac{4}{7}$ water | 420 ml | 560 ml | $\hat{y} \hat{y} \hat{y}$ |
| 3. | Choose your favourite combination of concentrate and water. |  |  |  |
|  | Multiple answers possible. |  |  |  |

## Juice

I can solve scaling problems.


How do you like your juice? Weak or strong?
We are going to make the perfect juice by investigating different combinations of concentrate and water.

First, we will try $\frac{2}{6}$ concentrate and $\frac{4}{6}$ water.

1) Pour 112 ml of concentrate into your cup. How much water do you need to add?
$\qquad$ ml

How much water would you need if you used 1252 ml of concentrate?
$\qquad$ ml
Is $\frac{2}{6}$ concentrate and $\frac{4}{6}$ water too strong or too weak?
2) Make and try these combinations.

| Combination | Amount of Concentrate | Amount of Water | Rating |
| :---: | :---: | :---: | :---: |
| $\frac{2}{5}$ concentrate and $\frac{4}{5}$ water | 225ml |  | $\hat{\Delta} \hat{y} \hat{y}$ |
| $\frac{2}{8}$ concentrate and $\frac{6}{8}$ water | 318 ml |  | $\hat{y} \hat{y} \hat{y}$ |
| $\frac{3}{7}$ concentrate and $\frac{4}{7}$ water |  | 560ml | $\hat{\sim} \hat{y} \hat{y}$ |

3) Choose your favourite combination of concentrate and water.

If the recipe was for 8 people, how much concentrate and water would you need for:
a) 16 people $\qquad$ ml
b) 1 person $\qquad$ ml
c) 100 people $\qquad$ ml

Round your answers to the nearest millilitre.


## Juice Answers

| Question | Answer |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 1. | Pour 110 ml of concentrate into your cup. How much water do you need to add? |  |  |  |
|  | 224 ml <br> How much water would you need if you used 552 ml of concentrate? <br> 2504 ml |  |  |  |
| 2. | Make and try these combinations. |  |  |  |
|  | Combination | Amount of Concentrate | Amount of Water | Rating |
|  | $\frac{2}{6}$ concentrate and $\frac{4}{6}$ water | 225 ml | 450 ml | $3 \pi$ |
|  | $\frac{2}{8}$ concentrate and $\frac{6}{8}$ water | 318 ml | 954 ml | $\pi$ |
|  | $\frac{3}{7}$ concentrate and $\frac{4}{7}$ water | 420 ml | 560 ml | $3 \pi$ |
| 3. | Choose your favourite combination of concentrate and water. |  |  |  |
|  | Multiple answers possible. |  |  |  |

