

Reasoning and Problem Solving

Step: 22 Fraction of an Amount

National Curriculum Objectives:

Mathematics Year 5: (5C8c) [Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates](#)

Differentiation:

Questions 1, 4 and 7 (Problem Solving)

Developing Use the number cards to complete the statement. Includes 2 missing numbers and unit fractions only.

Expected Use the number cards to complete the statement. Includes 4 missing numbers and simplest versions of non unit fractions only.

Greater Depth Use the number cards to complete the statement. Includes 5 missing numbers and mixed numbers.

Questions 2, 5 and 8 (Reasoning)

Developing Explain which statement or calculation is the odd one out. Includes unit fractions only.

Expected Explain which statement or calculation is the odd one out. Includes the simplest versions of non unit fractions only.

Greater Depth Explain which statement or calculation is the odd one out. Includes non unit fractions which need to be simplified and mixed numbers.

Questions 3, 6 and 9 (Problem Solving)

Developing Compare fractions of an amount to solve a word problem. Includes unit fractions only.

Expected Compare fractions of an amount to solve a word problem. Includes unit fractions only.

Greater Depth Compare fractions of an amount to solve a word problem. Includes non unit fractions which need to be simplified.

More [Year 5 and 6 Fractions](#) resources.

Did you like this resource? Don't forget to [review](#) it on our website.

Fraction of an Amount

1a. Use the cards below to make the statement correct.



$$\frac{1}{4} \text{ of } \square \text{ is } \square$$



5 PS

Fraction of an Amount

1b. Use the cards below to make the statement correct.



$$\frac{1}{3} \text{ of } \square \text{ is } \square$$



5 PS

2a. Circle the odd one out.

A. $\frac{1}{3}$ of 30

B. $\frac{1}{5}$ of 40

C. $\frac{1}{2}$ of 20

Explain your reasoning.



5 R

2b. Circle the odd one out.

A. $\frac{1}{2}$ of 12

B. $\frac{1}{4}$ of 20

C. $\frac{1}{5}$ of 25

Explain your reasoning.



5 R

3a. There are 18 pencils in a pot.



Harry takes $\frac{1}{6}$ of them.



Alina takes $\frac{1}{3}$ of them.

How many pencils did they each take?

How many pencils are left?



5 PS

3b. There are 24 cupcakes at a party.



Josh eats $\frac{1}{4}$ of them.



Sarah eats $\frac{1}{8}$ of them.

How many cupcakes did they each eat?

How many cupcakes are left?

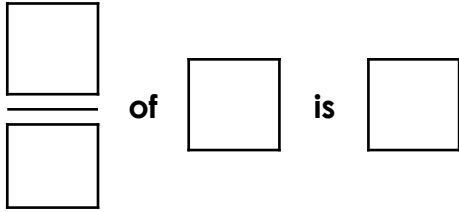


5 PS

Fraction of an Amount

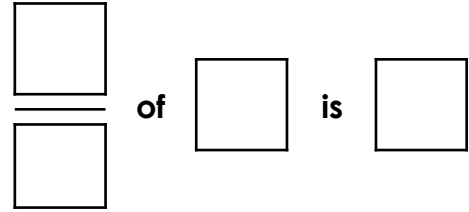
Fraction of an Amount

4a. Use the cards below to make the statement correct.



5 PS

4b. Use the cards below to make the statement correct.



5 PS

5a. Circle the odd one out.

- A. $\frac{4}{6}$ of 24
- B. $\frac{3}{8}$ of 24
- C. $\frac{2}{3}$ of 24

Explain your reasoning.



5 R

5b. Circle the odd one out.

- A. $\frac{2}{3}$ of 18
- B. $\frac{3}{4}$ of 16
- C. $\frac{5}{6}$ of 12

Explain your reasoning.



5 R

6a. There are 35 brownies at a bake sale.



Alex buys $\frac{2}{7}$ of them.



Suzie buys $\frac{4}{7}$ of them.

How many brownies did they each buy?

How many brownies are left?



5 PS

6b. There are 40 seeds in a packet.



Ivan plants $\frac{3}{8}$ of them.



Tanya plants $\frac{4}{8}$ of them.

How many seeds did they each plant?

How many seeds are left?

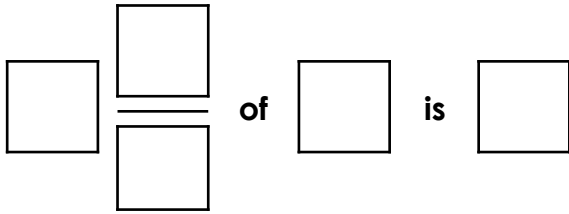


5 PS

Fraction of an Amount

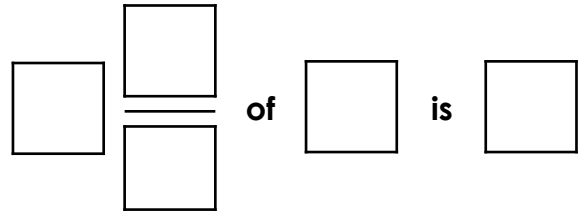
Fraction of an Amount

7a. Use the cards below to make the statement correct.



5 PS

7b. Use the cards below to make the statement correct.



5 PS

8a. Circle the odd one out.

A. $2 \frac{2}{3}$ of 9 is 24

B. $\frac{30}{36}$ of 42 is 24

C. $2 \frac{2}{5}$ of 10 is 24

Explain your reasoning.



5 R

8b. Circle the odd one out.

A. $3 \frac{1}{2}$ of 10 is 35

B. $\frac{28}{32}$ of 40 is 35

C. $2 \frac{3}{5}$ of 15 is 35

Explain your reasoning.



5 R

9a. There are 72 grapes in a bowl.



Jason eats $\frac{10}{45}$ of them.



Caitlin eats $\frac{9}{24}$ of them.

How many grapes did they each eat?

How many grapes are left?



5 PS

9b. There are 84 flowers in a field.



Oscar picks $\frac{10}{35}$ of them.



Amber picks $\frac{15}{36}$ of them.

How many flowers did they each pick?

How many flowers are left?



5 PS

Reasoning and Problem Solving Fraction of an Amount

Developing

1a. $\frac{1}{4}$ of 16 is 4

2a. B is the odd one out because the answer is 8. A and C = 10

3a. Harry takes 3 and Alina takes 6. There are 9 pencils left.

Expected

4a. $\frac{3}{4}$ of 12 is 9

5a. B is the odd one out because the answer is 9. A and C = 16

6a. Alex buys 10 and Suzie buys 20. There are 5 brownies left.

Greater Depth

7a. $4\frac{3}{5}$ of 10 is 46

8a. B is the odd one out because the answer is 35.

9a. Jason eats 16 and Caitlin eats 27. There are 29 grapes left.

Reasoning and Problem Solving Fraction of an Amount

Developing

1b. $\frac{1}{3}$ of 12 is 4

2b. A is the odd one out because the answer is 6. B and C = 5

3b. Josh eats 6 and Sarah eats 3. There are 15 cupcakes left.

Expected

4b. $\frac{3}{5}$ of 20 is 12

5b. C is the odd one out because the answer is 10. B and C = 12

6b. Ivan plants 15 and Tanya plants 20. There are 5 seeds left.

Greater Depth

7b. $3\frac{3}{4}$ of 12 is 45

8b. C is the odd one out because the answer is 39.

9b. Oscar picks 24 and Amber picks 35. There are 25 left.