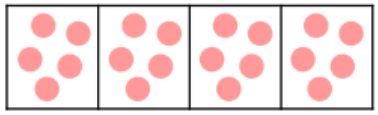
Working on it:

1a. Circle the number that is $\frac{1}{4}$ of the whole number represented below.



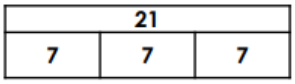
20 5 14

1b. Circle the number that is $\frac{1}{3}$ of the whole number represented below.

13 24 8

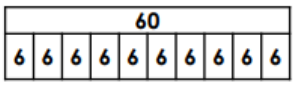
2a. Solve the calculation.

$\frac{1}{3}$ of 21 = ☐



2b. Solve the calculation.

$\frac{1}{10}$ of 60 = ☐



Problem Solving and Reasoning:

2a. Tom is making a stew. The recipe says to use $\frac{1}{4}$ the amount of potatoes as peppers. Tom uses 16 peppers but he's unsure of how many potatoes to use.

How many potatoes does Tom need? Show your working.

2b. Tina is making a fruit salad. The recipe says to use $\frac{1}{2}$ the amount of melons as apples. Tina uses 12 apples but she's unsure of how many melons to use.

How many melons does Tina need? Show your working.

3a. Alice and Chuan are calculating $\frac{1}{5}$ of 35.

Alice: The answer is 28.

Chuan: The answer is 7.

Who is correct? Explain how you know.

3b. Hannah and Sean are calculating $\frac{1}{4}$ of 28.

Hannah: The answer is 7.

Sean: The answer is 14.

Who is correct? Explain how you know.

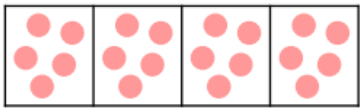
Got it:

5a. Circle the number that is $\frac{2}{3}$ of the whole number represented below.

12 | 10 | 18

VF

5b. Circle the number that is $\frac{3}{4}$ of the whole number represented below.



5 | 20 | 15

VF

8a. Use counters to match the calculation to the answer.

A.	$\frac{3}{5}$ of 35	63
B.	$\frac{9}{10}$ of 70	21
C.	$\frac{3}{7}$ of 56	45
D.	$\frac{5}{8}$ of 72	24

VF

8b. Use counters to match the calculation to the answer.

A.	$\frac{5}{6}$ of 36	24
B.	$\frac{2}{3}$ of 36	33
C.	$\frac{5}{7}$ of 28	30
D.	$\frac{3}{4}$ of 44	20

VF

Problem Solving and Reasoning:

5a. Tim is making a sauce. The recipe says to use $\frac{2}{3}$ the amount of carrots as tomatoes. Tim uses 15 tomatoes but he's unsure of how many carrots to use.

How many carrots does Tim need?
Explain how you know.

R

5b. Tara is making a marmalade. The recipe says to use $\frac{5}{6}$ the amount of lemons as oranges. Tara uses 18 oranges but she's unsure of how many lemons to use.

How many lemons does Tara need?
Explain how you know.

R

6a. Hafsa and Gabriel are calculating $\frac{5}{6}$ of 48.

Hafsa: The answer is 40.

Gabriel: The answer is 12.

Who is correct? Explain how you know.

R

6b. Sinead and Johnny are calculating $\frac{2}{5}$ of 35.

Sinead: The answer is 21.

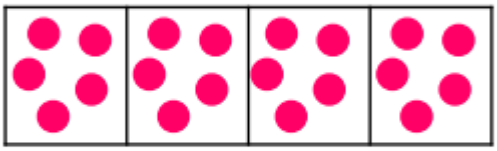
Johnny: The answer is 14.

Who is correct? Explain how you know.

R

Smashed it:

9a. Circle the number that is $\frac{4}{8}$ of the whole number represented below.



20 40 10

GD VF

10a. Use the first calculation to solve the second.

$\frac{6}{8}$ of 44 = 33

$\frac{6}{8}$ of 880 = ☐

GD VF

10b. Use the first calculation to solve the second.

$\frac{5}{7}$ of 42 = 30

$\frac{5}{7}$ of 840 = ☐

GD VF

11a. Use the related facts to solve both calculations.

If $\frac{1}{4}$ of 40 = ☐

then $\frac{3}{4}$ of 80 = ☐

GD VF

11b. Use the related facts to solve both calculations.

If $\frac{2}{5}$ of 75 = ☐

then $\frac{4}{5}$ of 150 = ☐

GD VF

Problem Solving and Reasoning:

8a. Todd is making 6 pies. The recipe says to use $\frac{3}{7}$ the amount of pears as plums for each pie. Todd uses 14 plums for a pie but he's unsure of how many pears to use.

How many pears does Todd need for 6 pies? Explain how you know.

8b. Tera is making soup for 8. The recipe says to use $\frac{2}{9}$ the amount of chillies as garlic for each person. Tera uses 18 garlic pieces for 2 people but she's unsure of how many chillies to use.

How many chillies does Tera need for 8 portions of soup? Explain how you know.

9a. Steph and Cian calculated $\frac{6}{8}$ of 32.

Steph: I just need to double the answer to calculate $\frac{6}{8}$ of 96.

Cian: The answer is the same as $\frac{2}{8}$ of 96.

Who is correct? Explain how you know.

9b. Isabel and Jake calculated $\frac{4}{12}$ of 72.

Isabel: The answer is the same as $\frac{4}{6}$ of 36.

Jake: I can multiply the answer by 10 to calculate $\frac{8}{12}$ of 720.

Who is correct? Explain how you know.

Answers

Working on it:

1a. 5

1b. 8

2a. 7

2b. 6

2a. Tom needs 4 potatoes because 16 ÷ 4 = 4 and 4 x 1 = 4.

2b. Tina needs 6 melons because 12 ÷ 2 = 6 and 6 x 1 = 6.

3a. Chuan is correct. Alice has taken one fifth away from 35.

3b. Hannah is correct. Sean has calculated half of 28.

Got it:

5a. 12

5b. 15

8a. A. 21; B. 63; C. 24; D. 45

8b. A. 30; B. 24; C. 20; D. 33

5a. Tim needs 10 carrots because 15 ÷ 3 = 5 and 5 x 2 = 10.

5b. Tara needs 15 lemons because 18 ÷ 6 = 3 and 3 x 5 = 15.

6a. Hafsa is correct. Gabriel has only calculated one quarter of 48.

6b. Johnny is correct. Sinead has calculated three fifths of 35.

Smashed it:

9a. 10

10a. 660

10b. 600

11a. If $\frac{1}{4}$ of 40 = 10, then $\frac{3}{4}$ of 80 = 60.

11b. If $\frac{2}{5}$ of 75 = 30, then $\frac{4}{5}$ of 150 = 120.

8a. Todd needs 36 pears in total because $\frac{3}{7}$ of 14 is 6. That's enough pears for 1 pie but because Todd is making 6 pies, he needs to multiple 6 by 6 to get 36 pears in total.

8b. Tera needs 16 chillies in total because $\frac{2}{9}$ of 18 is 4. That's enough chillies for 2 people but because Tera is making 6 soup for 8 people, she needs to multiple 4 by 4 to get 16 chillies in total.

9a. Cian is correct because 96 is three times larger than 32 and the fraction is three times smaller so it will produce the same answer.

9b. Isabel is correct because 36 is half of 72 and the fraction is double the original so it will produce the same answer.