Divide Fractions by Integers 1

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1a. The missing digit in all the calculations is the same. Find the missing number.

A. $\dfrac{4}{\square} \div 2 = \dfrac{2}{6}$

B. $\dfrac{12}{15} \div \square = \dfrac{2}{15}$

C. $\dfrac{\square}{7} \div 3 = \dfrac{2}{7}$

PS

1b. The missing digit in all the calculations is the same. Find the missing number.

A. $\dfrac{10}{\square} \div 5 = \dfrac{2}{12}$

B. $\dfrac{24}{30} \div \square = \dfrac{2}{30}$

C. $\dfrac{\square}{15} \div 6 = \dfrac{2}{15}$

PS

2a. Josh and Kelly are calculating $\dfrac{4}{10} \div 2$.

The answer is $\dfrac{2}{10}$.

Josh

The answer is $\dfrac{2}{5}$.

Kelly

Who is correct?
Explain how you know.

R

2b. Vlad and Chan are calculating $\dfrac{6}{12} \div 3$.

The answer is $\dfrac{3}{6}$.

Chan

The answer is $\dfrac{2}{12}$.
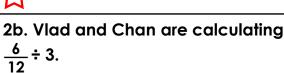
Vlad

Who is correct?
Explain how you know.

R

3a. Felix has $\dfrac{6}{8}$ of his pizza left.

He wants to share them between himself and two friends.
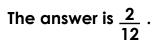
Write the calculation.

What fraction of pizza does each child get?

PS

3b. Natalie has $\dfrac{8}{10}$ of a box of crackers left.

She wants to share them between herself and three friends.

Write the calculation.

What fraction of crackers does each child get?

PS

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Reasoning and Problem Solving – Divide Fractions by Integers 1 – Year 6 Developing

4a. The missing digit in all the calculations is the same. Find the missing number.

A. $\dfrac{8}{\square} \div 4 = \dfrac{2}{8}$

B. $\dfrac{24}{30} \div \square = \dfrac{3}{30}$

C. $\dfrac{\square}{16} \div 2 = \dfrac{4}{16}$

E   PS

4b. The missing digit in all the calculations is the same. Find the missing number.

A. $\dfrac{21}{\square} \div 7 = \dfrac{3}{28}$

B. $\dfrac{28}{40} \div \square = \dfrac{1}{40}$

C. $\dfrac{\square}{40} \div 7 = \dfrac{4}{40}$

E   PS

5a. Cian and Lucy are calculating $\dfrac{16}{8} \div 4$.

The answer is $\dfrac{4}{2}$.

Cian

The answer is $\dfrac{4}{8}$.

Lucy

Who is correct?
Explain how you know.

E   R

5b. Ben and Steph are calculating $\dfrac{18}{12} \div 6$.

The answer is $\dfrac{18}{2}$.

Ben

The answer is $\dfrac{3}{12}$.

Steph

Who is correct?
Explain how you know.

E   R

6a. Alice has $\dfrac{15}{18}$ of her packet of sweets left.

She wants to share them between herself and four friends.

Write the calculation.

What fraction of sweets does each child get?

E   PS

6b. Lex has $\dfrac{28}{30}$ of a packet of biscuits left.

He wants to share them between himself and six friends.

Write the calculation.

What fraction of biscuits does each child get?

E   PS

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7a. The missing digit in all the calculations is the same. Find the missing number.

A. $1\dfrac{6}{\Box} \div 3 = \dfrac{6}{12}$

B. $2\dfrac{4}{10} \div \Box = \dfrac{2}{10}$

C. $\dfrac{\Box}{5} \div 4 = \dfrac{3}{5}$

PS

7b. The missing digit in all the calculations is the same. Find the missing number.

A. $\dfrac{12}{\Box} \div 6 = \dfrac{2}{3}$

B. $7\dfrac{1}{2} \div \Box = \dfrac{5}{2}$

C. $1\dfrac{\Box}{4} \div 7 = \dfrac{1}{4}$

PS

8a. Lana and Hafsa are calculating $8\dfrac{8}{11} \div 8$.

The answer is $\dfrac{12}{11}$.

Lana

The answer is $\dfrac{11}{11}$.

Hafsa

Who is correct?
Explain how you know.

R

8b. Pete and Chloe are calculating $2\dfrac{6}{9} \div 3$.

The answer is $\dfrac{8}{9}$.

Pete

The answer is $\dfrac{24}{3}$.

Chloe

Who is correct?
Explain how you know.

R

9a. Johnny has $5\dfrac{10}{12}$ of his packet of sweets left.

He wants to share them between himself and six friends.

Write the calculation.

What fraction of sweets does each child get?

PS

9b. Clark has $2\dfrac{8}{12}$ layers of a box of chocolates left.

He wants to share them between himself and seven friends.

Write the calculation.

What fraction of chocolates does each child get?

PS

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Reasoning and Problem Solving
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Developing

1a. 6

2a. Josh is correct. Kelly has divided both the numerator and denominator by 2.

3a. The calculation is $\frac{6}{8} \div 3$. The answer is $\frac{2}{8}$ or $\frac{1}{4}$.

Expected

4a. 8

5a. Lucy is correct. Cian has divided both the numerator and denominator by 4.

6a. The calculation is $\frac{15}{18} \div 5$. The answer is $\frac{3}{18}$ or $\frac{1}{6}$.

Greater Depth

7a. 12

8a. Lana is correct. Hafsa has divided 88 by 8 rather than 96 divided by 8.

9a. The calculation is $5\frac{10}{12} \div 7$. The answer is $\frac{10}{12}$ or $\frac{5}{6}$.

Developing

1b. 12

2b. Vlad is correct. Chan has divided the denominator and the numerator by 2.

3b. The calculation is $\frac{8}{10} \div 4$. The answer is $\frac{2}{10}$ or $\frac{1}{5}$.

Expected

4b. 28

5b. Steph is correct. Ben has divided the denominator instead of the numerator.

6b. The calculation is $\frac{28}{30} \div 7$. The answer is $\frac{4}{30}$ or $\frac{2}{15}$.

Greater Depth

7b. 3

8b. Pete is correct. Chloe has divided the denominator instead of the numerator.

9b. The calculation is $2\frac{8}{12} \div 8$. The answer is $\frac{4}{12}$ or $\frac{1}{3}$.

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