Timester Challenge

Add and Subtract Fractions

Work out $\frac{1}{2}+\frac{1}{4}$

Circle the correct answer.

$\frac{2}{6}$ $\frac{1}{4}$ $\frac{3}{4}$ $\frac{2}{8}$

Bronze

Calculate $3\frac{5}{7}+2\frac{4}{7}$

Give your answer as a mixed number.

Bronze

Jessica has done some calculations.

Explain how you know the answer is wrong without working out the correct answer.

$$\frac{5}{8}-\frac{2}{5}=\frac{3}{3}$$

Bronze

Work out

$$\frac{4}{7}+\frac{3}{5}$$

Give your answer as a mixed number.

Silver

Josh worked out $\frac{3}{4}-\frac{1}{5}$.

He wrote:

$$\frac{3}{4}-\frac{1}{5}=\frac{3}{20}-\frac{1}{20}=\frac{2}{20}=\frac{1}{10}$$

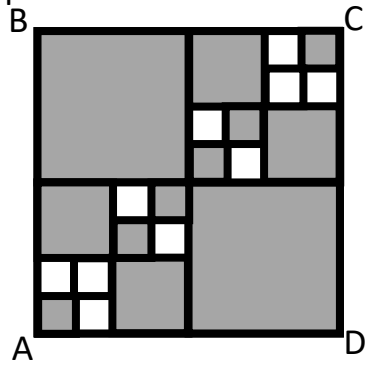
The answer of $\frac{1}{10}$ is wrong.

a) Describe one mistake that Josh made.

b) Work out the correct answer.

Silver

ABCD is a square.



The diagram is drawn accurately.

What fraction of the square ABCD is shaded?

Gold

Timester Challenge

Add and Subtract Fractions

Answers

Work out $\frac{1}{2}+\frac{1}{4}$

Circle the correct answer.

$\frac{2}{6}$ $\frac{1}{4}$ $\frac{3}{4}$ $\frac{2}{8}$

Bronze

Calculate $3\frac{5}{7}+2\frac{4}{7}$

Give your answer as a mixed number.

$$5\frac{5+4}{7}=5\frac{9}{7}=6\frac{2}{7}$$

Bronze

Jessica has done some calculations.

Explain how you know the answer is wrong without working out the correct answer.

$$\frac{5}{8}-\frac{2}{5}=\frac{3}{3}$$

$\frac{5}{8}$ and $\frac{2}{5}$ are both less than one, so when subtracting one from another the answer must be less than 1.

Bronze

Work out

$$\frac{4}{7}+\frac{3}{5}$$

Give your answer as a mixed number.

$$\frac{20}{35}+\frac{21}{35}=\frac{41}{35}=1\frac{6}{35}$$

Silver

Josh worked out $\frac{3}{4}-\frac{1}{5}$.

He wrote:

$$\frac{3}{4}-\frac{1}{5}=\frac{3}{20}-\frac{1}{20}=\frac{2}{20}=\frac{1}{10}$$

The answer of $\frac{1}{10}$ is wrong.

a) Describe one mistake that Josh made.

He only adjusted the denominators when finding the common denominator of 20.

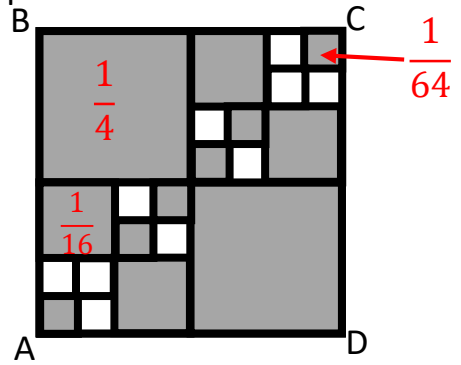
This means $\frac{3}{4}\neq\frac{3}{20}$ and $\frac{1}{5}\neq\frac{1}{20}$

b) Work out the correct answer.

$$\frac{15}{20}-\frac{4}{20}=\frac{11}{20}$$

Silver

ABCD is a square.



The diagram is drawn accurately.

What fraction of the square ABCD is shaded?

$$\frac{2}{4}+\frac{4}{16}+\frac{6}{64}$$

$$=\frac{16}{32}+\frac{8}{32}+\frac{3}{32}$$

$$=\frac{27}{32}$$

Gold