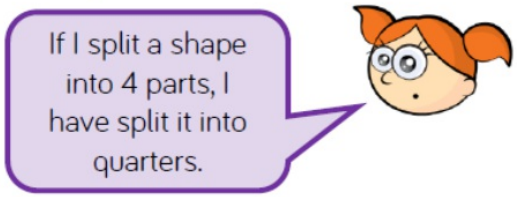
Day 1 extension questions

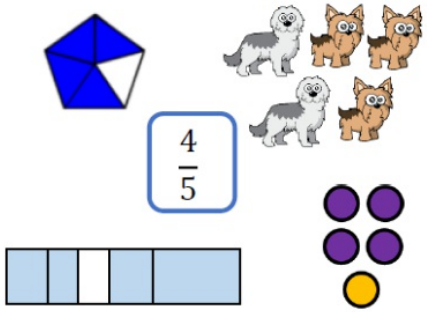
1. Always, Sometimes, Never?

Alex says,



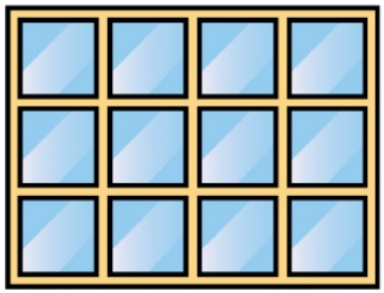
Explain your answer.

2. Which representations of $\frac{4}{5}$ are incorrect?

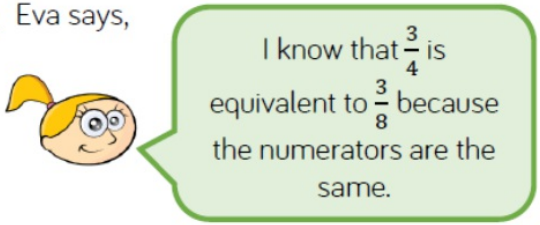


Explain how you know.

3. How many equivalent fractions can you see in this picture?



4. Eva says,



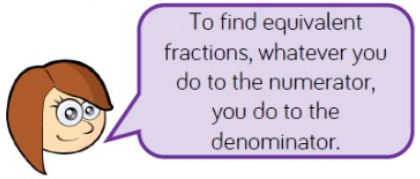
Is Eva correct?
Explain why.

5. Ron has two strips of the same sized paper.

He folds the strips into different sized fractions.
He shades in three equal parts on one strip and six equal parts on the other strip.
The shaded areas are equal.

What fractions could he have folded his strips into?

6. Rosie says,



Using her method, here are the equivalent fractions Rosie has found for $\frac{4}{8}$

$\frac{4}{8} = \frac{8}{16}$ $\frac{4}{8} = \frac{6}{10}$

$\frac{4}{8} = \frac{2}{4}$ $\frac{4}{8} = \frac{1}{5}$

Are all Rosie's fractions equivalent?
Does Rosie's method work?
Explain your reasons.

7. Here are some fraction cards.

All of the fractions are equivalent.

$\frac{4}{A}$ $\frac{B}{C}$ $\frac{20}{50}$

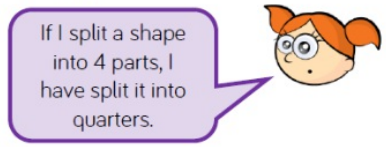
A + B = 16
Calculate the value of C.

Day 1 extension questions ANSWERS

1.

Always, Sometimes, Never?

Alex says,



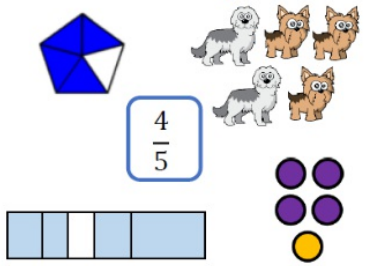
Explain your answer.

Sometimes

If the shape is not split equally, it will not be in quarters.

2.

Which representations of $\frac{4}{5}$ are incorrect?



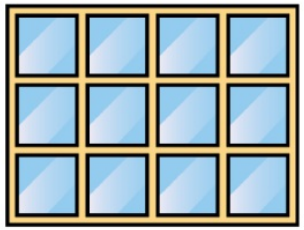
Explain how you know.

The image of the dogs could represent $\frac{2}{5}$ or $\frac{3}{5}$

The bar model is not divided into equal parts so this does not represent $\frac{4}{5}$

3.

How many equivalent fractions can you see in this picture?



Children can give a variety of possibilities.
Examples:

$$\frac{1}{2} = \frac{6}{12} = \frac{3}{6}$$

$$\frac{1}{4} = \frac{3}{12}$$

4.

Eva says,

Is Eva correct?
Explain why.

Eva is not correct.
$\frac{3}{4}$ is equivalent to $\frac{6}{8}$
When the numerators are the same, the larger the denominator, the smaller the fraction.

5.

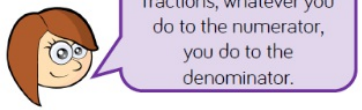
Ron has two strips of the same sized paper.
He folds the strips into different sized fractions.
He shades in three equal parts on one strip and six equal parts on the other strip.
The shaded areas are equal.

What fractions could he have folded his strips into?

Ron could have folded his strips into sixths and twelfths, quarters and eighths or any other fractions where one of the denominators is double the other.

6.

Rosie says,



Using her method, here are the equivalent fractions Rosie has found for $\frac{4}{8}$

$$\frac{4}{8} = \frac{8}{16} \qquad \frac{4}{8} = \frac{6}{10}$$

$$\frac{4}{8} = \frac{2}{4} \qquad \frac{4}{8} = \frac{1}{5}$$

Are all Rosie's fractions equivalent?
Does Rosie's method work?
Explain your reasons.

$\frac{4}{8} = \frac{1}{5}$ and $\frac{4}{8} = \frac{6}{10}$ are incorrect.

Rosie's method doesn't always work. It works when multiplying or dividing both the numerator or denominator but not when adding or subtracting the same thing to both.

7.

Here are some fraction cards.
All of the fractions are equivalent.

$$\frac{4}{A} \qquad \frac{B}{C} \qquad \frac{20}{50}$$

A + B = 16
Calculate the value of C.

A = 10
B = 6
C = 15