## Reasoning and Problem Solving Equivalent Fractions 1

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### **Developing**

1a. Zaina is not correct because  $\frac{1}{5}$  is equivalent to  $\frac{2}{10}$ , not  $\frac{2}{8}$ .

2a. A, C and D are equivalent because they represent  $\frac{1}{2}$ . B is not equivalent because it represents  $\frac{2}{3}$ .

3a. 
$$\frac{6}{8} = \frac{3}{4}$$
;  $\frac{2}{8} = \frac{1}{4}$ 

## **Expected**

4a. Noah is not correct because  $\frac{3}{4}$  is equivalent to  $\frac{9}{12}$ , not  $\frac{10}{12}$ .

5a. A, B, C and D are equivalent because they represent  $\frac{3}{5}$ . E is not equivalent because it represents  $\frac{3}{8}$ .

6a. Various answers, for example:  $\frac{12}{19} = \frac{6}{9} = \frac{2}{3}$ 

## **Greater Depth**

7a. Freya is not correct because  $\frac{2}{6}$  is equivalent to  $\frac{5}{15}$ , not  $\frac{6}{15}$ .

8a. A and E represent  $\frac{3}{4}$ ; B and D represent  $\frac{2}{3}$ . C is not equivalent to any option.

9a. Various answers, for example:

$$\frac{1}{4} = \frac{6}{24} = \frac{3}{12}$$

### **Developing**

1b. Hollie is correct because  $\frac{3}{4}$  is equivalent to  $\frac{6}{8}$ .

2b. A, B and C are equivalent because they represent  $\frac{1}{3}$ . D is not equivalent because it represents  $\frac{3}{5}$ .

3b. 
$$\frac{8}{14} = \frac{4}{7}$$
;  $\frac{6}{14} = \frac{3}{7}$ 

### **Expected**

4b. Charlie is not correct because  $\frac{2}{3}$  is equivalent to  $\frac{12}{18}$ , not  $\frac{11}{18}$ .

5b. A, B, D and E are equivalent because they represent  $\frac{1}{3}$ . C is not equivalent because it represents  $\frac{1}{4}$ .

6b. Various answers, for example:

$$\frac{24}{28} = \frac{6}{7} = \frac{12}{14}$$

## **Greater Depth**

7b. Abdul is not correct because 18 cannot be divided into quarters so  $\frac{3}{4}$  will not have an equivalent fraction in eighteenths.

8a. False. A and C represent  $\frac{2}{5}$ ; B and E represent  $\frac{2}{3}$ . D is not equivalent to any option.

9a. Various answers, for example:

$$\frac{1}{7} = \frac{3}{21} = \frac{2}{14}$$