

# E1 EQUIVALENT FRACTIONS

I can find other fractions that are equivalent to a given fraction.

**A** Write the equivalent fractions shown in each pair of diagrams.

Example  $\frac{2}{4} = \frac{1}{2}$

1. Circle divided into 4 equal parts, 1 shaded. Circle divided into 8 equal parts, 2 shaded.

2. Circle divided into 5 equal parts, 2 shaded. Circle divided into 10 equal parts, 4 shaded.

3. Rectangle divided into 2 equal vertical strips, 1 shaded. Rectangle divided into 4 equal vertical strips, 2 shaded.

4. Rectangle divided into 10 equal vertical strips, 4 shaded. Rectangle divided into 20 equal vertical strips, 8 shaded.

5. Circle divided into 3 equal sectors, 2 shaded. Circle divided into 6 equal sectors, 4 shaded.

6. Circle divided into 8 equal sectors, 3 shaded. Circle divided into 16 equal sectors, 6 shaded.

7. Rectangle divided into 6 equal squares, 3 shaded. Rectangle divided into 12 equal squares, 6 shaded.

**B** Use the number lines above. Copy and complete the equivalent fractions.

1  $\frac{1}{2} = \frac{16}{\square}$     2  $\frac{1}{2} = \frac{8}{\square}$     3  $\frac{1}{8} = \frac{16}{\square}$     4  $\frac{4}{3} = \frac{8}{\square}$     5  $\frac{8}{5} = \frac{16}{\square}$     6  $\frac{1}{2} = \frac{16}{\square}$

7  $\frac{4}{2} = \frac{16}{\square}$     8  $\frac{8}{3} = \frac{16}{\square}$     9  $\frac{1}{1} = \frac{4}{\square}$     10  $\frac{1}{4} = \frac{8}{\square}$     11  $\frac{8}{7} = \frac{16}{\square}$     12  $\frac{4}{3} = \frac{16}{\square}$

13  $\frac{3}{2} = \frac{9}{\square}$     14  $\frac{6}{5} = \frac{12}{\square}$     15  $\frac{3}{1} = \frac{6}{\square}$     16  $\frac{9}{6} = \frac{12}{\square}$     17  $\frac{3}{2} = \frac{6}{\square}$     18  $\frac{6}{4} = \frac{9}{\square}$

19  $\frac{3}{3} = \frac{9}{\square}$     20  $\frac{12}{4} = \frac{9}{\square}$     21  $\frac{12}{2} = \frac{6}{\square}$     22  $\frac{12}{8} = \frac{6}{\square}$     23  $\frac{9}{3} = \frac{6}{\square}$     24  $\frac{12}{4} = \frac{3}{\square}$

Use the number lines. Copy and complete.

**C** Copy and complete the equivalent fractions.

1  $\frac{5}{2} = \frac{10}{\square}$     2  $\frac{4}{3} = \frac{16}{\square}$     3  $\frac{10}{7} = \frac{100}{\square}$     4  $\frac{1}{1} = \frac{18}{\square}$     5  $\frac{19}{25} = \frac{100}{\square}$     6  $\frac{7}{5} = \frac{14}{\square}$

7  $\frac{15}{10} = \frac{3}{\square}$     8  $\frac{12}{20} = \frac{5}{\square}$     9  $\frac{16}{8} = \frac{2}{\square}$     10  $\frac{100}{20} = \frac{20}{\square}$     11  $\frac{18}{6} = \frac{3}{\square}$     12  $\frac{15}{20} = \frac{4}{\square}$

Continue these fraction chains for four further terms.

13  $\frac{4}{3} = \frac{8}{6} = \frac{12}{9}$     14  $\frac{6}{1} = \frac{12}{2} = \frac{18}{3}$     15  $\frac{5}{2} = \frac{10}{4} = \frac{15}{6}$     16  $\frac{1}{8} = \frac{2}{16} = \frac{3}{24}$     17  $\frac{3}{2} = \frac{6}{4} = \frac{9}{6}$     18  $\frac{9}{9} = \frac{18}{18} = \frac{27}{27}$

Write three more fractions equivalent to:

19  $\frac{13}{5}$     20  $\frac{36}{8}$     21  $\frac{24}{10}$     22  $\frac{33}{18}$

23  $\frac{16}{9}$     24  $\frac{40}{35}$     25  $\frac{28}{60}$     26  $\frac{150}{42}$