## Simplifying Fractions

1. a .

b.


Shade $\frac{3}{4}$.

Shade $\frac{6}{8}$.
c. What do you notice about the shading in the two shapes?
d. What does this tell you about $\frac{3}{4}$ and $\frac{6}{8}$ ?
2. a .
 Shade $\frac{1}{3}$.
b.


Shade $\frac{3}{9}$.
c. What do you notice about the shading in the two shapes?
d. What does this tell you about $\frac{1}{3}$ and $\frac{3}{9}$ ?
3. a.

b.


Shade $\frac{1}{2}$.

Shade $\frac{5}{10}$.
c. What do you notice about the shading in the two shapes?
d. What does this tell you about $\frac{1}{2}$ and $\frac{5}{10}$ ?
4. a. Find a number, other than 1 , that both 5 and 15 can be divided by.
b. Find a number, other than 1 , that both 2 and 8 can be divided by.
c. Find a number, other than 1, that both 3 and 12 can be divided by.
d. Find a number, other than 1, that both 8 and 4 can be divided by.
e. Find a number, other than 1, that both 27 and 9 can be divided by.
f. Find a number, other than 1, that both 11 and 33 can be divided by.
g. Find a number, other than 1, that both 5 and 25 can be divided by.
h. Find a number, other than 1, that both 8 and 64 can be divided by.
i. Find a number, other than 1, that both 21 and 35 can be divided by.
5. Use your answers to part 4 to simplify the following fractions. Don't forget to make sure that they are fully simplified; you may sometimes need to simplify again after you have simplified once.
a. $\frac{5}{15}$
b. $\frac{2}{8}$
C. $\frac{3}{12}$
d. $\frac{4}{8}$
e. $\frac{9}{27}$
f. $\frac{11}{33}$
g. $\frac{5}{25}$
h. $\frac{8}{64}$
i. $\frac{21}{35}$
6. Fully simplify the following fractions:
a. $\frac{8}{32}$
b. $\frac{7}{21}$
C. $\frac{9}{15}$
d. $\frac{8}{12}$
e. $\frac{15}{45}$
f. $\frac{5}{50}$
g. $\frac{27}{63}$
h. $\frac{44}{132}$

