1. Draw bar models to determine if the two ratios are proportional.
   a. In one box of cookies, the ratio of chocolate chip cookies to oatmeal cookies is 3 to 8. A bigger box of cookies has a ratio of 12 to 32 chocolate chip to oatmeal cookies.

   b. The ratio of cats to total pets in the first pet store is 3 to 9. In the second pet store the ratio of cats to total pets is 6 to 18

2. The ratio of pink flowers to purple flowers in a vase is 6:8. The ratio of pink flowers to purple flowers in a different vase is 8:10

3. Now reduce the fractions in the problems above. What do you observe?

2-9 (contin)

4. Determine if each set of ratios below is proportional by reducing them to simplest form.

a. $\dfrac{7}{9}$ $\dfrac{21}{27}$	d. $\dfrac{10}{12}$ $\dfrac{15}{30}$	g. $\dfrac{1}{3}$ $\dfrac{3}{16}$
b. $\dfrac{2}{3}$ $\dfrac{3}{8}$	e. $\dfrac{9}{12}$ $\dfrac{49}{50}$	h. $\dfrac{7}{10}$ $\dfrac{28}{40}$
c. $\dfrac{15}{35}$ $\dfrac{24}{52}$	f. $\dfrac{4}{16}$ $\dfrac{2}{8}$	i. $\dfrac{6}{15}$ $\dfrac{8}{4}$

Challenge: Can you think of other ways to determine proportionality?