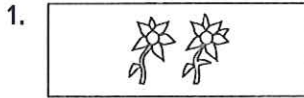


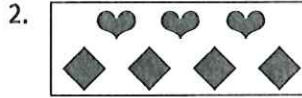
Practice 5-1

Ratios and Rates

Write three ratios that each diagram can represent.



2 fl : 2 stems
3 petals : 2 fl.
3 leaves : 2 fl.



3 hearts : 4 diamonds
3 hearts : 7 shapes
4 diamonds : 3 hearts



5 writing tools : 2 pens
3 pencils : 2 pens
2 pens : 3 pencils

Write each ratio in simplest form.

4. 9 cm : 12 cm 3 : 4
 5. 20 in. out of 25 in. 4 out of 5
 6. 16 ft to 24 ft 2 to 3
 7. $\frac{6\text{ m}}{21\text{ m}}$ $\frac{2}{7}$
 8. 100 yd to 85 yd 20 to 17
 9. $\frac{18\text{ km}}{30\text{ km}}$ $\frac{3}{5}$
 10. 6 in. to 2 ft 1 to 4
 11. 10 min to 3 h 1 to 18
 12. 20 s to 5 min 1 to 15

Use a calculator, paper and pencil, or mental math to find each unit rate.

13. \$67.92 for 4 gal $\frac{\$16.98}{\text{gal}}$
 14. \$21.00 for 6 h $\frac{\$3.5}{\text{hr}}$
 15. 250 mi in 4 h $\frac{62.5\text{ mi}}{\text{hr}}$
 16. 141 words in 3 min $\frac{47\text{ words}}{\text{min}}$
 17. \$5.94 for 6 carnations $\frac{\$.99}{\text{carn.}}$
 18. 36 min for 12 songs $\frac{3\text{ min}}{\text{song}}$

The table at the right shows the results of a survey. Write each of the ratios in simplest form and as a decimal to the nearest hundredth.

Which Meal Do You Want for the Party?

Tacos	Pizza
### IIII	### ###
###	### I

19. Tacos to Pizza $\frac{7}{8}$; .88
 20. Pizza to Tacos $\frac{8}{7}$; 1.14
 21. Tacos to the total $\frac{7}{15}$; .47
 22. Pizza to the total $\frac{8}{15}$; .53

23. Which is the better buy: a 16-oz box of cereal for \$3.89 or a 6-oz box of cereal for \$1.55?
 24. A bag contains 8 yellow marbles and 6 blue marbles. What number of yellow marbles can you add to the bag so that the ratio of yellow to blue marbles is 2 : 1?

better \rightarrow 16-oz for \$3.89 \rightarrow $\frac{\$.24}{\text{oz}}$
 6-oz for \$1.55 \rightarrow $\frac{\$.26}{\text{oz}}$

4 yellow marbles
 12 yell. : 6 blue
 2 : 1