1. Sample answer: It's easier to understand a unit rate than a ratio containing fractions. You can use a unit rate to solve problems more easily than if you use a ratio of fractions.
2. $\frac{5}{3}$
$\frac{5}{3}$ or $1 \frac{2}{3}$ cups of yellow paint
3. Sample answer: When making a table of equivalent ratios, multiply both terms by the same number so that the second term is 1 . For example, multiply both terms of $\frac{2}{3}: \frac{1}{7}$ by 7 to get $\frac{14}{3}: 1$. When calculating with fractions, divide both terms of the ration by the ratio by $\frac{1}{7}$, which is the same as multiplying by its reciprocal $\frac{7}{1}$ or 7 . The calculations are the same.
4. 552 miles per hour
5. Chanterelle mushrooms; Sample answer: Cremini mushrooms are $\$ 16.88$ per pound, while Chanterelle mushrooms are $\$ 15.98$ per pound.
6. $7 \frac{1}{2}$ cups of flour
7. $\frac{24}{4}$ or 6

1
6
$\begin{array}{lllllll}9 . & & \frac{1}{3} & & \frac{3}{1} & 21 \\ & \frac{1}{3} & \frac{1}{3} & \frac{1}{3} & \frac{3}{1} & 1\end{array}$
21 miles per gallon
10. $\frac{3}{8}$
11. $\frac{8}{3}$ or $2 \frac{2}{3}$ miles per hour
12. 480 Calories
13. a. $\frac{5}{48}$ hour per task
b. $9 \frac{3}{5}$ tasks per hour
14. a. $23 \frac{2}{3}$ miles per gallon
b. 34 miles per gallon
c. the silver car
15. a. 4 pounds per quart
b. He multiplied both terms by the denominator. He should have divided.
16. Ari, Cindy, Beth
17. Fence $B$ is 6 inches long on the blueprint.
18. 39
19. $13 \quad 39$
$\overline{3}$
8. $\frac{9}{5}$ or $1 \frac{4}{5}$

1
$\frac{9}{5}$ or $1 \frac{4}{5}$

