



Penrose GED Prep

1.8 Ratios and Proportions

In this worksheet, we will practice simplifying ratios and solving proportions. If you would like further explanation before attempting these problems, links to video descriptions can be found at the end of this worksheet. Starred problems have video solutions.

1 Solve for x .

a. $\frac{3}{6} = \frac{x}{2}$

b.* $\frac{5}{7} = \frac{40}{x}$

c. $\frac{x}{96} = \frac{5}{6}$

d. $\frac{3}{x} = \frac{42}{70}$

e. $\frac{3}{10} = \frac{x}{34}$

f. $\frac{x}{57} = \frac{3}{4}$

2 * Frida is baking brownies. She needs $1\frac{1}{2}$ cups of flour and $\frac{3}{4}$ cups of sugar for one batch. What is the ratio of sugar to flour?

- (a) 1 : 2
- (b) 2 : 1
- (c) 1 : 3
- (d) 3 : 1

3 * Alondra is packing for a trip. She wants to pack three shirts for every two shorts. If she has 15 shirts to pack, how many shorts should she pack?

- (a) 20
- (b) 15
- (c) 12
- (d) 10

4 * Paradise State University, home of the Adams and Eves, has 4620 students, and 2520 are women. What is the ratio of men to women on campus?

- (a) 6 : 7
- (b) 7 : 6
- (c) 5 : 6
- (d) 6 : 5



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Additional Resources:

- Khan Academy video explaining how to simplify ratios and solve proportions: <https://www.youtube.com/watch?v=WfqgFBGet7s>
- A detailed solution to problem 1.b: <http://youtu.be/USPBsjekXiY>
- A detailed solution to problem 2: <http://youtu.be/8Qw7rCY5A8Y>
- A detailed solution to problem 3: <http://youtu.be/b4jqSPbpasE>
- A detailed solution to problem 4: <http://youtu.be/7oGN48W68fM>