y

40

36

32

28

24

20

16

12

8

4

0

2 3 4 5 6 7 8 9

1

Number of Chairs

k = 12

10

Find the Constant of Proportionality From Graphs

Each graph below shows a proportional relationship. Determine the constant of proportionality, *k*, for each graph. Write your answer in the box, and simplify any fractions.

- Ada is growing sugar crystals for science class. There is a proportional relationship between the amount of water she uses, *x*, and the amount of sugar she uses, *y*.
- 2 The Riverside Fire Department is hosting a fundraising banquet. There is a proportional relationship between the number of tables needed, *x*, and the number of chairs needed, *y*.



3 Abdul is a lifeguard at Splash Central Water Park. There is a proportional relationship between the number of hours he works, *x*, and the total amount of money he earns, *y*.



4 Levi is renting a pedal boat at the lake. There is a proportional relationship between the amount of time he rents the boat, *x*, and the total cost, *y*.

Number of Tables



Find the Constant of Proportionality From Graphs

Keep going! Determine the constant of proportionality, *k*, for each graph below. Write your answer in the box, and simplify any fractions.

5 Nora is having her birthday party at a laser tag arena. There is a proportional relationship between the number of people playing laser tag at the party, *x*, and the total amount it will cost, *y*.



7 Maria is knitting a scarf. There is a proportional relationship between the number of rows she knits, *x*, and the length of her scarf, *y*.



6 Jane is making ice cream sundaes for her friends. There is a proportional relationship between the scoops of ice cream, *x*, and the number of sundaes, *y*.



8 Tyler is making frosting for his brother's graduation cake. There is a proportional relationship between the amount of powdered sugar he uses, *x*, and the amount of butter he uses, *y*.

