

Name \_\_\_\_\_

Date \_\_\_\_\_

# Writing & Solving Equations

Write and solve an equation for each situation.

1. You are buying bottles of glue for Mrs. Perry's class. A bottle of glue is \$0.74. Write an equation relating the total cost ( $c$ ) to the number of glue bottles ( $g$ ) you purchase.

Define your variable: \_\_\_\_\_

Write the equation: \_\_\_\_\_

What is the total cost if you purchase 7 bottles of glue?

2. A data plan for your cell phone will cost you \$29.99 per month. Write an equation relating the total cost ( $c$ ) to the number of months ( $m$ ) you have the data plan.

Define your variable: \_\_\_\_\_

Write the equation: \_\_\_\_\_

What is the total cost of your cell phone plan for 12 months?

3. Some cell phone companies offer a cheaper data plan, but you have to pay a one time sign up fee. The sign up fee is \$375 and the cost is \$25 per month. Write an equation relating the total cost ( $c$ ) to the number of months ( $m$ ) you have this data plan.

Define your variable: \_\_\_\_\_

Write the equation: \_\_\_\_\_

What is the total cost of your cell phone plan for 12 months?

4. You can download songs online for \$0.99 each. Write an equation relating the total cost ( $c$ ) to the number of songs ( $s$ ) you download.

Define your variable: \_\_\_\_\_

Write the equation: \_\_\_\_\_

How much would 50 songs cost?

5. Another website allows you to download songs for \$.75 each, but you pay a sign up fee of \$15. Write an equation relating the total cost ( $c$ ) to the number of songs ( $s$ ) you download.

Define your variable: \_\_\_\_\_

Write the equation: \_\_\_\_\_



How much would 50 songs cost on this website?

6. You and your friends go out to lunch. Each of you buys a soda for \$2 and you buy a plate of nachos for \$7.50 that you all share. Write an equation relating the total cost of lunch ( $c$ ) to the number of people ( $p$ ) that go.

Define your variable: \_\_\_\_\_

Write the equation: \_\_\_\_\_

How much would it cost for 5 people to go to lunch?

7. A rental car company charges a fee of \$0.50 per mile and a flat fee of \$250 for renting a car. Write an equation relating the total cost ( $c$ ) of the car rental to the number of miles ( $m$ ) driven.

Define your variable: \_\_\_\_\_  
Write the equation: \_\_\_\_\_

How much will it cost to drive 850 miles?

8. Your parents are renting a moon bounce for your little sister's birthday party. It costs \$175 to rent, plus \$15 for each day you keep it. Write an equation relating the total cost ( $c$ ) of the moon bounce to the number of days ( $d$ ) you keep it.

Define your variable: \_\_\_\_\_  
Write the equation: \_\_\_\_\_

How much will it cost to keep the moon bounce for 5 days?