

1. Find the value of each variable. (from Unit 5, Lesson 9)

A.  $a \cdot 3 = -30$

C.  $-8 \cdot 12 = c$

B.  $-9 \cdot b = 45$

D.  $d \cdot 88 = -88,000$

2. Match each equation to its solution and to the story it describes.

Equations:

Solutions:

a.  $5x - 7 = 3$

w.  $-4$

b.  $7 = 3(5 - x)$

x.  $\frac{8}{3}$

c.  $3x + 5 = -7$

y.  $2$

d.  $\frac{1}{3}(x + 7) = 5$

z.  $8$

Stories:

- The temperature is  $-7$ . Since midnight the temperature tripled and then rose 5 degrees. What was temperature at midnight?
- Jada has 7 pink roses and some white roses. She gives all of them away,  $\frac{1}{3}$  of them to each of her 3 favorite teachers. Each teacher gets 5 roses. How many white roses did she give away?
- A musical instrument company reduced the time it takes for a worker to build a guitar. Before the reduction it took 5 hours. Now in 7 hours they can build 3 guitars. By how much did they reduce the time it takes to build each guitar?
- A club puts its members into 5 groups for an activity. After 7 students have to leave early, there are only 3 students left to finish the activity. How many students were in each group?

