

Unit 1 Challenge Questions

1. Suppose your dog has puppies at 2:00 p.m. and you call two friends. In 20 minutes they each call 2 friends to tell them the news. In 20 minutes, these friends each call 2 others. This continues all afternoon. Assuming that no one calls someone that already knows, how many people will know by 6:00 p.m.?
2. Which of these numbers is a result of **squaring** the base?
a. 35 b. 40 c. 44 d. 49
3. $(7+2) \div 3 + \square^2 = 7$ Fill in the box with the missing number.
4. Mrs. Thompson is putting tile on her bathroom floor. Each tile measures 2 **inches** on each side. The bathroom floor is 3 **feet** long and 2 **feet** wide. How many tiles will she use to cover the entire floor?
5. Write an expression showing the order of operations and **solve** to find the answer.

In an apple orchard, 4 friends picked 3 bags of apples each and 15 extra apples. Each bag holds 10 apples. How many apples did the friends pick in all?