

# Autumn Challenges

NAME \_\_\_\_\_

1. Greta wants to fill a basket with gourds. She needs 18 gourds. Which would be a better deal for her: 4/\$1.00 or \$.27 each? Justify your answer.
2. Cedric Chipmunk has challenged Sammy Squirrel to an acorn-gathering contest. Cedric says he will gather exactly 100 acorns a day. Sammy says that he will start with 50 acorns on the first day and each day he will gather 50 more than the day before. By the 6th day, which one is winning? Explain.
3. These are the low and high temperatures for 5 days in October in Philadelphia.  
Saturday: 59-74; Sunday: 57-72; Monday: 49-70; Tuesday: 43- 65; Wednesday: 48-67  
Which day showed the greatest change in temperature?  
Which 2 days showed the same temperature difference?
4. Jake and Derrick are two twelve year olds who rake leaves to make money. Jake does it the old fashioned way with a rake. On one Saturday it takes him 6 hours to do 5 yards. He charges \$16 for each job. Derrick rents a leaf blower for \$20/day. He is able to do 8 yards in 4 hours. He charges \$13 for each job. Which one makes the most money? Which one is the better businessman? Justify your answer.
5. Marcie wants to plant mums along the border of her 12 foot garden. She plans on placing them  $1\frac{1}{2}$  feet apart. If she plants the first one  $1\frac{1}{2}$  feet in, how many mums will she need? Show how you figured this out.

6. Together Tom and Jared sell 85 cups of hot chocolate at the football game. Jared sells 7 more cups than Tom. How many do they each sell?
7. Farmer Bo has a field with 60 rows, each with 58 cornstalks. Farmer Joe has 61 rows with 57 cornstalks in each. Who has the most cornstalks? Show your work.
8. Beth buys her pumpkins at Sleepy Hollow Farm. They charge \$.50 a pound. She buys one that weighs 9 pounds, one that weighs 12 pounds, and one that weighs  $8\frac{1}{2}$  pounds. How much does she spend?