

GRADE FIVE – CONTENT STANDARD #8, 9

ACTIVITY A
Permission Granted

GOOD NEWS TRAVELS FAST

Good news travels fast. Iris saved enough money from her paper route to buy a new bicycle. She immediately told two friends, who, ten minutes later, each repeated the news to two other friends. Ten more minutes later, these friends each told two others. If the news continues to spread in this fashion, how many people will know about Iris’s new bicycle after eighty minutes?

Students can use their calculators to find the entries for specific times.

| | | | | | | |
|--------------------|---|----|----|----|----|----|
| Time | 0 | 10 | 20 | 30 | 40 | 50 |
| People told | 2 | 4 | 8 | 16 | 32 | |
| Total | 2 | 6 | 14 | 30 | | |

Extension:

Find an algebraic rule that will describe the total for any time (t). Students can also be challenged to develop another representation of the data, such as a graph.

[Source: Curriculum & Evaluation Standards for School Mathematics, National Council of Teachers of Mathematics, p.99]

A.164-a