Assessment Task
TI-15 Explorer™: A Tap on the Shoulder

AT

Name:

1. Complete the tables below by finding a number pattern:

a)

Step	1	2	3	4	5
Value	3	6	9	12	

b)

Step	1	2	3	4	5
Value	0.5	1	1.5	2	

c)

Step	5	10	15	20	25
Value	10	20	30	40	

d)

Step	2	4	6	10	13
Value	3	6	9	15	

e)

Step	5	10	15	20	23
Value		5		10	

2. For each of the number patterns above:

   a) Describe how you found the missing values

   _____

   _____

   _____

b) Find a rule in words that describes the relationship between the Step number and the Value:

_____

_____

_____

_____

c) Find a rule using symbols that describes the relationship between the Step number and the Value:

_____

_____

_____

_____

3. Use the rule to complete the table below:
Value is equal to one and a half times the step number

Step	2	4	5	11	21
Value					

4. Describe how you would enter a rule into the TI-15 calculator (using the OP key) that would calculate the rule:

Value equals three times the step value plus two

_____

_____
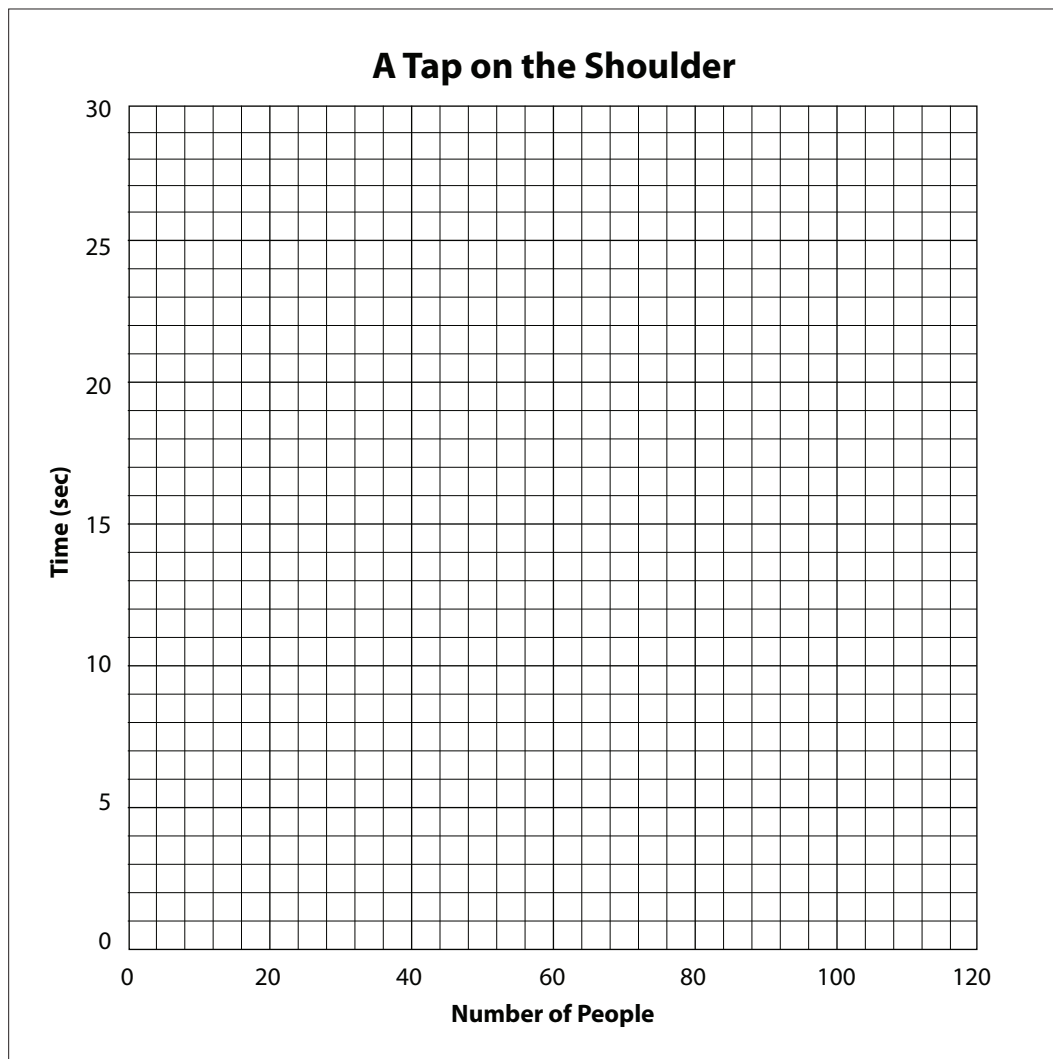
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5. The following data was recorded from a class of students who performed the Tap on the Shoulder activity.

Number of Students	5	10	15	20	25
Time (sec)	1.45	2.7	3.95	5.2	6.45

a) Graph this data on the grid below:

A Tap on the Shoulder

b) Use this graph to predict the amount of time it would take to pass on a tap to 100 people:

_____

_____

_____

c) Find a rule in words and symbols that describes the relationship between the number of students in a line and the time it takes to pass on a tap:

_____

_____

_____

d) Use the rule you found in c to make a prediction of how long it would take to pass a tap on to 100 people:

_____

_____

_____

e) Discuss how close this is to the prediction you made using a graph.
   Write down any reasons for any difference between these predictions:

_____

_____

_____

_____

_____

_____