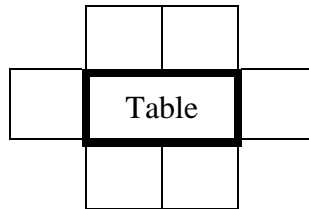


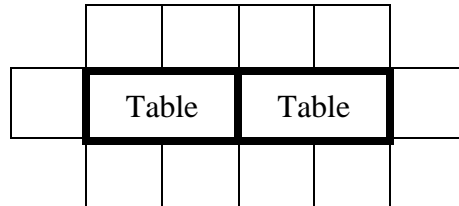
2016 Mathematics Standards of Learning  
Algebra Readiness Formative Assessment

5.18

1. Your teacher is planning a party for your class, and each student is going to bring one visitor. She started planning the seating by drawing a picture of the picnic table below.



She thinks that 6 people can sit a table, but that won't be enough seating for every student and every guest. She wants everyone to be able to sit at the same table. If she pushes two tables together, 10 people could sit down. How many picnic tables will your class need to seat 32 people?



- a. Using centimeter grid paper, extend the pattern to show seating for 32 people.
- b. Complete the table to describe the relationship found between the number of seats and tables. Then explain the relationship in words and/or symbols.

Tables	Seats

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2. Complete the following table by determining the missing value, then describe the pattern you used in words and symbols.

Cars	People
2	8
3	12
?	20
7	28
10	?

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3. You and your friend decided to go the store and buy some candy bars. The candy bars cost \$2 for 1. Which table describes the relationship between the cost of the candy bars and the number of candy bars.

<b>Number of Candy Bars</b>	1	2	3	4
<b>Total Cost</b>	\$1	\$2	\$3	\$4

<b>Number of Candy Bars</b>	1	2	3	4
<b>Total Cost</b>	\$2	\$3	\$4	\$5

<b>Number of Candy Bars</b>	1	2	3	4
<b>Total Cost</b>	\$2	\$4	\$6	\$8

<b>Number of Candy Bars</b>	1	2	3	4
<b>Total Cost</b>	\$2	\$2	\$5	\$6

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4. Identify the rule that describes the relationship in the table.

Input	Output
20	10
26	16
38	28
52	42
59	49

a. given any number, add 10

b. given any number, subtract 10

c. given any number, multiply by 2

d. given any number, divide by 2

5. Identify the rule that describes the pattern in the list:

0.15, 0.35, 0.55, 0.75

a. subtract 0.20

b. add 0.20

c. divide by 0.5

c. multiply by 5