

2016 Mathematics Standards of Learning  
Algebra Readiness Formative Assessment

4.15

1. This pattern was made using the first six shapes.



Identify and describe the pattern, then extend the pattern two more shapes.

2. Sam went to a store to buy candy bars. The price list for the candy bars is shown.

<b>Buying Candy Bars</b>	
<b>Number of Candy Bars</b>	<b>Total Cost</b>
3	\$6
4	\$8
6	\$12
8	\$16

Identify and describe the relationship between the number of candy bars and total cost as a rule; then, determine what would be the cost for 10 candy bars.

3. Look at the pattern of numbers shown below.

2, 10, 18, 26, ...

What will be the next number in the pattern?

- a. 28
- b. 30
- c. 32
- d. 34

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4. The table shows a number pattern

Input	18	22	26	34
Output	8	12	16	24

Which could be the rule for this pattern?

- a. Add 9
  - b. Subtract 10
  - c. Multiply by 4
  - d. Divide by 2
5. Caldon is using an addition rule to make the number pattern shown below.

$$2\frac{1}{3}, 3, 3\frac{2}{3}, 4\frac{1}{3}, 5$$

If the pattern continues in the same way, what will be the next number in the pattern?

- a. 6
- b.  $6\frac{1}{3}$
- c.  $5\frac{2}{3}$
- d.  $5\frac{1}{3}$