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.

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

| **Buying Candy Bars** |
| --- |
| **Number of Candy Bars** | **Total Cost** |
| 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.

1. Look at the pattern of numbers shown below.

2, 10, 18, 26, …

What will be the next number in the pattern?

1. 28
2. 30
3. 32
4. 34
5. The table shows a number pattern

| Input | 18 | 22 | 26 | 34 |
| --- | --- | --- | --- | --- |
| Output | 8 | 12 | 16 | 24 |

Which could be the rule for this pattern?

1. Add 9
2. Subtract 10
3. Multiply by 4
4. 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?

1. 6
2. $6\frac{1}{3}$
3. $5\frac{2}{3} $
4. $5\frac{1}{3}$

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