|  |  |
| --- | --- |
| Core \_\_\_\_\_\_\_ Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_ Score /12  DIRECTIONS:   * **ALL** problems **MUST** show some kind of evidence of work to receive credit; work may include computation, diagrams, explanations, and/or any other work that shows your thinking and problem solving strategies. * You are expected to use resources such as dictionaries, math textbooks, websites, and calculators (for checking computation only) to assist you in the completion and checking of each problem. * You are expected to take advantage of “Quick Checks”. | |
| **A)** Simplify. Show all work, one step at a time.  *p* - 5(2 - 3*p*) + 1  Quick estimate: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Final complete answer (work including all steps):  Resource used to check: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | **B)** Find the difference.  Proof: (Algorithm must be worked vertically.)  Final complete answer:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Resource used to check: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| **C)** Solve. Show all work, one step at a time.  Quick estimate: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Final complete answer (Work including all steps):  Resource used to check: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | **D)** Students collected $212 to help the victims of a flood. A large company donated an additional $2 for every dollar the students collected. Write and solve an equation that shows the entire amount of money that was given the flood victims.  Quick estimate of final amount: \_\_\_\_\_\_\_\_\_\_\_\_\_\_  Final complete answer (Includes the equation and the work steps leading to the solution.):  Resource used to check: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| **E)** Find the value of b.  Quick estimate: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Final complete answer (work including all steps):  Resource used to check: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | **F)** The circumference of a can of soda is  inches. The circumference of a can of tuna fish is  inches. How much greater is the circumference of the can of tuna fish than the can of soda?  Quick estimate: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Proof: *(Algorithm must be worked vertically.)*  Final complete answer:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Resource used to check: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| **G)** What is an expression for the missing value in the table?   |  |  |  |  |  | | --- | --- | --- | --- | --- | | Position | 1 | 2 | 3 | *n* | | Term | 1 | 8 | 27 |  |   Quick estimate: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Final complete answer:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Resource used to check: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | **H)** If , which of the following statements must be true?  A. x must be a positive integer  B. x must be a negative integer  C. x could be a positive integer or a negative integer  D. It is not possible to determine if x is positive or negative.  Quick estimate: Letter \_\_\_\_\_\_  Proof:  Final complete answer:\_\_\_\_\_\_\_  Resource used to check: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| **I)** At 9:05 AM, Emma arrived at school late, running through the front door of the school. She had left home 27 minutes earlier. At what time did Emma leave home?  Quick estimate: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Proof:  Final complete answer:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Resource used to check: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | **J)** Simplify the expression.  Quick estimate: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Proof:  Final complete answer:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Resource used to check: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| **K)** Which equation might be used to find the number of mosquito bed nets (*N)* that could be purchased with $630 if the cost of the nets was $10 each?  *n = 630***2**  = 630  *=n*  Quick estimate: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Proof:  Final complete answer:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Resource used to check: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | **L)** Explain why a right triangle cannot have an obtuse angle.  Quick ideas: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Proof:  Final complete answer:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Resource used to check: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

[](http://www.clipartof.com/portfolio/djart/illustration/happy-white-male-chef-in-uniform-carrying-a-tray-of-cake-slices-and-cupcakes-20307.html)

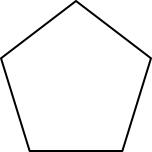
**\*\* Baker’s Dozen Bonus \*\***

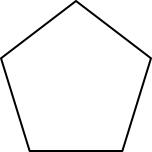
DIRECTIONS:

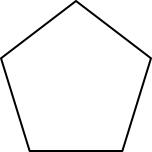
* **NO HELP FROM PARENTS OR ANY OTHER PERSON ON THIS BONUS!**
* **YOU MAY NOT USE ANY RESOURCES SUCH AS BOOKS OR ELECTRONIC RESOURCES!**
* You **MUST** show some kind of evidence of work to receive credit; work may include computation, diagrams, explanations, and/or any other work that shows your thinking and problem solving strategies.

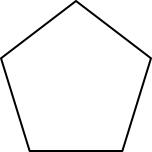
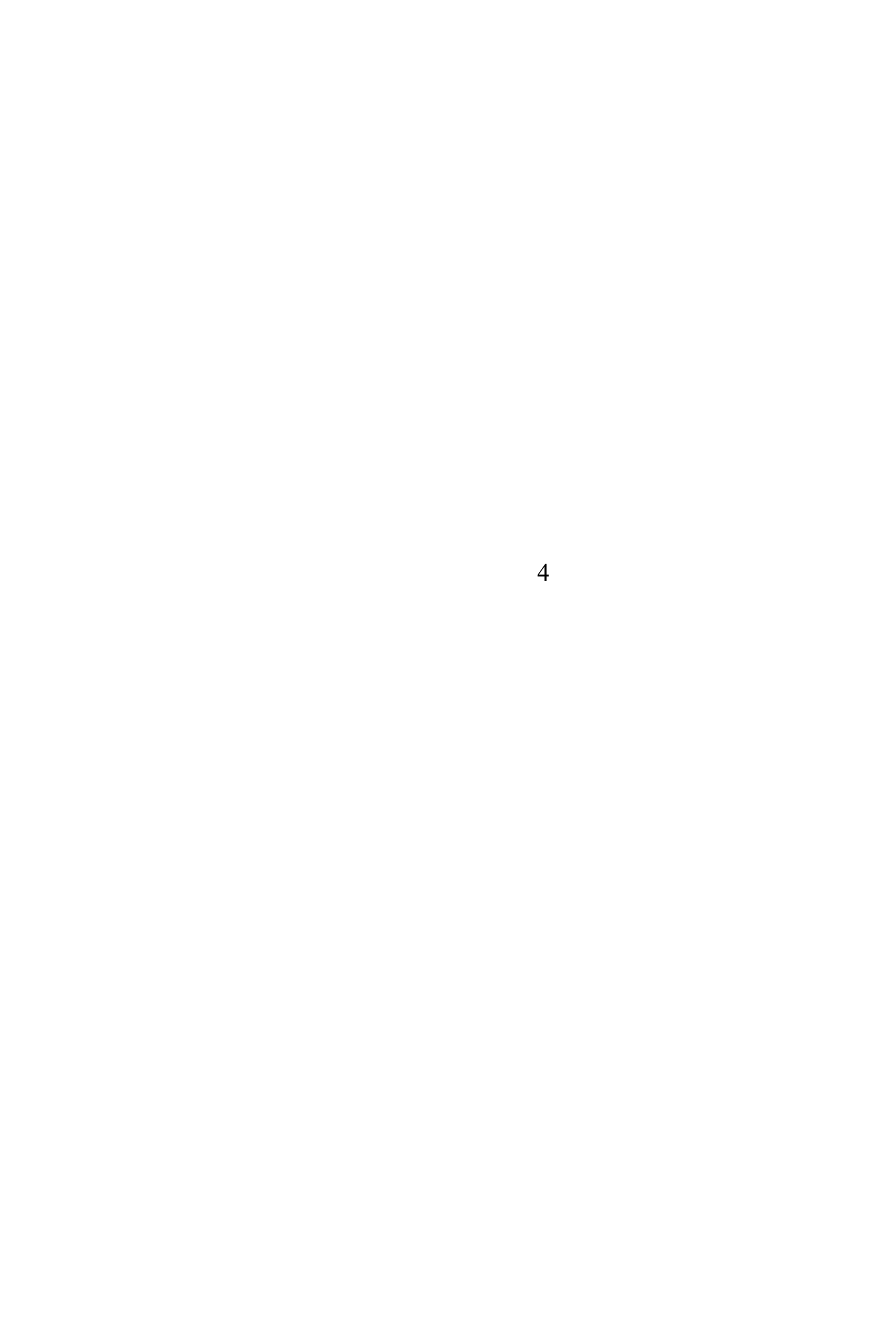
What is the missing number? Explain the entire pattern.

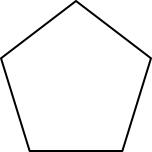
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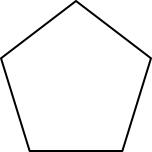
?

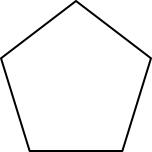
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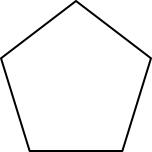
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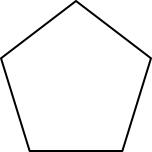
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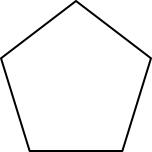
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**72**

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