

1. KC is putting air in his bike tire. Each time he pushes the pump handle down, the pressure increase p pounds. The initial pressure in the tire was i pounds. After KC pushed the pump handle down 25 times, the pressure was 75 pounds per square inch. Which equation represents the amount of air in the tire before KC began pumping?

a) $i = 25p + 75$ b) $i = 25p - 75$ c) $i = 75 - 25p$ d) $p = 75 - 25i$

2. Jenna placed an equal number of items in many different bags, with no item left over. Use this information and the following clues to solve the problem.

- She had between 20 and 50 items.
- She could have put 10 items in each bag without having any leftover.
- She found that placing 8 items in each bag would leave 6 left over.

How many items did she have?

a) 20 b) 30 c) 40 d) 50

3. Victor pays \$5 a month plus \$0.10 a minute for long distance service. If his monthly bill is \$12.20, how many minutes was he charged for?

a) 720 b) 122 c) 72 d) 50

4. The variables a , b , and c represent different integers. Use the properties of integers to determine the value for each variable. For each variable, show the work you used to determine your answer.

$a + b = 0$
$a \cdot c = 0$
$a \cdot a = 1$
$b + c = -1$

Answers:

$a =$ _____

$b =$ _____

$c =$ _____