Pre-Calculus 10

Chapter 7 Practice Test

*Solve each system by graphing. Check your solutions.*

1. y=x−5

y=3−x

1. m+2n=2

3m+2n=-6

1. x+y−4=0

5x−y−8=0

*Deserts*

1. The two largest deserts in the world are the Sahara Desert and the Australian Desert. The sum of their area is 13 million square kilometers. The area of the Sahara Desert is 5 million square kilometers more than the area of the Australian Desert. Find the area of each desert.

*Solve each system by substitution. Check each solution.*

1. y=6−2x

3x+2y=10

1. 3x+y−2=0

5x+2y−3=0

1. 7=b−2a

4=a+b

1. 3m−6n=1

m+3n=2

*Lawn fertilizer*

1. One lawn fertilizer is 24% nitrogen, and another is 12% nitrogen. How much of each fertilizer should be mixed to obtain 100 kg of fertilizer that is 21% nitrogen?

*Canadian place names*

1. The two most common place names in Canada are Mount Pleasant and Centreville. A total of 31 places have these names. Triple the number of places names Centreville is 13 more than double the number of places named Mount Pleasant. How many places in Canada have each name?

*Solve each system of equations by elimination. Check each solution.*

1. 2x+3y=4

4x−3y=−10

1. 4a+5b=−3

4a+9b=1

1. 3x+4y=17

7x−2y=17

1. 2x−5y=3

3x+2y=14

*Car wash*

1. The Outdoors Club held a car wash to raise money. They washed cars for $5 each and vans for S7 each. They washed 45 Vehicles and earned $243. How many of each type of vehicle did they wash?

*Solve. Check each solution*

1. $\frac{x}{3}+\frac{y}{2}=3$

$\frac{x+3}{2}+\frac{y+1}{5}=4$