

N3CS20

Practice Set 21_{CV}

Instructions: Answer each question on loose leaf, quad-ruled (graph paper), headed properly and written in lead-graphite. Remember to fold paper along the center, work exercises in order top to bottom, left column then right column. Staple multiple pages

1. GV1 p281 #1
2. Gv1 p281 #2
3. Gv1 p281 #3
4. Gv1 p281 #4
5. Gv1 p281 #5
6. Gv1 p282 #6
7. GV1 P291 #1
8. GV1 p291 #2
9. Gv1 p291 #3
10. Gv1 p291 #4: Use the following Domain: $D : \{-5, -1, 2, 7\}$
11. Gv1 p291 #5: Use the following Domain: $D : \{-2, 0, 3, 5\}$
12. Gv1 p291 #6: Use the following Domain: $D : \{-3, -2, 1, 6\}$
13. Gv1 p248 #12
14. Gv1 p249 #22
15. Gv1 p250 #24

16.

The diagonal of a rectangular floor is $\sqrt{40}$ feet long. 8.NS1

Part A: Select all of the sets of numbers to which $\sqrt{40}$ belongs.

- ☐ real
- ☐ integer
- ☐ rational
- ☐ irrational
- ☐ whole
- ☐ natural

Part B: Change one digit in $\sqrt{40}$ to a different digit so that the number belongs to a different set of numbers. Explain why changing that digit changes the sets to which the number belongs.

17.

Anju purchased a storage cube that has a volume of 10 cubic feet. She wants to put it on a shelf on her wall that is 24 inches below the ceiling. Will the cube fit? Explain your reasoning. 8.EE.2

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18.

Angelo and Deborah are landscapers. Angelo charges \$45.50 for each job plus \$15 an hour. Deborah charges \$20.50 for each job plus \$20 an hour. Select whether each statement is true or false. B.EE.7, B.EE.7b

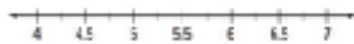
True False

- ☐ ☐ For 2 hours of work, Angelo charges more.
- ☐ ☐ For 5 hours of work, Deborah charges less.
- ☐ ☐ The equation $45.5x + 15 = 20.5x + 20$ can be solved to find the number of hours for which the total cost is the same to hire either landscaper.
- ☐ ☐ Both landscapers charge the same amount for a 5-hour job.

19.

The radius of a circular fountain with area A can be approximated by solving the equation $\frac{A}{9} = r^2$. The area of the fountain is 84 square feet. B.N3.2

Part A: Use a number line to estimate the value of the radius. Plot the square roots of the perfect squares between which the radius is located.



Part B: Find the estimate of the radius of the circular fountain to the nearest foot.

20.

The table shows the number of people living in the United States and in each region of the country according to the 2010 census. Write the correct number to make each statement true. B.EE.3, B.EE.4

2 3 4 5

20 20 10 60

U.S. Region	Population (approx.)
Northeast	0.5×10^8
Midwest	5.0×10^7
South	1.1×10^8
West	2.2×10^7
United States (U.S.)	2.8×10^8

The population of the South is about times greater than the population of the Northeast.

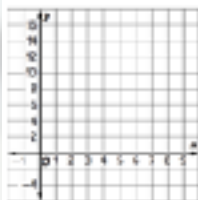
The population of the entire United States is about times greater than the population of the South alone.

The population of the entire United States is about times greater than the population of the Midwest alone.

21.

Yardley sold 3 times as many ads for the yearbook as Xavier. Xavier sold 8 fewer ads than Yardley. The number of ads sold by each student can be represented by this system of equations: $y = 3x$ and $y = x + 8$. B.EE.8, B.EE.8b, B.EE.8c

Part A: Graph the equations on the coordinate plane. Label the point of intersection.



Part B: What is the solution to the system of equations? What does the solution represent?