

**N3CS19**

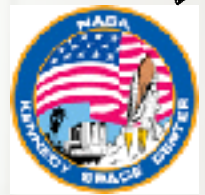
**Practice Set 20**

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. Solve the equation:  $\frac{v}{12} = 1.2$       2. Solve the equation:  $y + \frac{1}{2} = \frac{3}{5}$
3. Solve the equation:  $8.4 = 1.2n$       4. Solve the equation:  $w - \frac{2}{5} = 1\frac{3}{5}$
5. Estimate the product:  $2\sqrt{13}$       6. Break down the radical  $\sqrt{32}$
7. Simplify the expression; write exponents as positive:  $\frac{(2^2x^3y^{-4})^3}{16x^{-3}y^4}$
8. Which of the following are rational? Select 3 that apply, and be prepared to justify!
- A)  $\sqrt{5}$       B)  $\frac{7}{3}$       C)  $\sqrt{17}$       D)  $\sqrt{64}$       E)  $\frac{-72}{8}$

9. Solve the equation:  $-\frac{v}{32} = 3.2$       10. Solve the equation:  $-5\frac{1}{6} = 2\frac{1}{3} + p$
11. Solve the equation:  $-7.2 = -1.8n$       12. Solve the equation:  $w - \frac{3}{8} = -2\frac{1}{4}$
13. Estimate the difference:  $3\sqrt{23} - 8$       14. Break down the radical:  $\sqrt{128}$
15. Simplify the expression; write exponents as positive:  $\frac{(3^2x^{-4}y^2)^3}{81x^3y^{-4}}$
16. Which of the following are greater than 7 but less than 14? Select all that apply; be prepared to justify!
- A)  $\sqrt{44}$       B)  $\sqrt{53}$       C)  $\sqrt{97}$       D)  $\sqrt{153}$



17. Solve the equation:  $-\frac{3}{5}v = 1.6$       18. Solve the equation:  $y + \frac{1}{3} = -0.75$
19. Solve the equation:  $-1.6 = -\frac{5}{8}n$       20. Solve the equation:  $w - 2.75 = -4\frac{1}{4}$
21. Estimate the sum:  $4\sqrt{19} + 5\sqrt{40}$       22. Break down the radical:  $\sqrt{162}$
23. Simplify the expression; write the exponents as positive:  $\frac{(2^{-3}x^{-4}y^3)^{-3}}{2^8x^9y^{-5}}$
24. Which of the following irrational expressions is located between 6 and 8 on the number line? Select *three* that apply, and be prepared to justify!
- A)  $2\sqrt{15}$       B)  $\sqrt{7} + 4$       C)  $8 - \sqrt{5}$       D)  $\sqrt{23} + \sqrt{8}$       E)  $\sqrt{80} - 3$

