Mathematics

Power Standard 8:2

Pre-Formative Test

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Hour \_\_\_\_\_\_\_\_\_\_\_

1. Which of the following is listed from least to greatest?
2. -1, -2, -3.25, 0.6, 2.375, 200%
3. 0.6, 2.375, 200%, -1, -2, -3.25
4. -3.25, -2, -1, 0.6, 2.375, 200%
5. -3.25, -2, -1, 0.6, 200%, 2.375
6. 4⁵=
7. 20
8. 1024
9. 45
10. 27 =
11. 3 3
12. 93
13. 3 + 3 + 3
14. 34
15. Write the following in scientific notation:

0.000023=

1. 23·10000
2. 2.3·10⁵
3. 2.3·10 -5
4. 0.23·10-6
5. Write the following in scientific notation:

15700 =

1. 15.7 ·103
2. 1.57 · 10 2
3. 157 · 102
4. 1.57 · 10 4

6. Write the following in standard form:

5.63 · 10 -3 =

1. 0.00563
2. 5,630
3. -5.63
4. 0.000563

7. Write the following in standard form:

9.4 · 104 =

1. 940,000
2. 94,000
3. 94,444
4. 0.00094
5. Divide 23 by 114 and round your answer to the nearest hundredth.
6. 0.2
7. 0.202
8. 0.20
9. 4.96
10. Carla is making 1 ½ times a recipe. The original recipe calls for 4¼ cups of flour. How many cups of flour does she need? Show work.

Show your work here.

Answer \_\_\_\_\_\_\_\_\_\_\_\_\_

1. A recipe for 2 dozen cookies calls for 2 ¼ cups of flour. In order to make six dozen cookies, how many cups of flour should be used? Show work.

Show your work here.

Answer \_\_\_\_\_\_\_\_\_\_\_\_\_

1. Rita got 12 out of 15 correct on her math test. Express the number she got correct as a fraction in simplest form, as a decimal, and as a percent.

Show your work here.

Answer \_\_\_\_\_\_\_\_\_\_\_\_\_

1. Explain how to solve – (2/5)x = 14 using properties of equality. Use the term **multiplicative inverse** in your explanation.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Answer \_\_\_\_\_\_\_\_\_\_\_\_\_

13. Solve for x: x – (-0.3) = 5

1. x = 4.7
2. x = 5.3
3. x = 50.3
4. x = 5.03
5. The planet Mercury takes 0.24 Earth-year to make one revolution around the Sun.

Write and solve a multiplication equation to determine the number of revolutions Mercury makes in 32.5 Earth-years. Round your answer to hundredths.

Equation:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Work:

Show your work here.

Answer \_\_\_\_\_\_\_\_\_\_\_\_\_