

MRC use: Time In _____ Out _____

Instructor use only: No Notes, No Book, No Calculator, One Part Test, Time Limit 40 min., Last Day:

Name:

Date:

Math 20 Test #1

Work for up to 40 minutes. Calculators are **not** allowed.

Reduce fraction answers.

No need to change improper fraction answers to mixed numerals.

Show numbered step-by-step answers!

1. Estimate the division problem $158 \div 43.2$ by rounding both numbers to the nearest tens place.
2. Round 6368.6368 to the nearest thousandth.
3. How many factors does 56 have?
4. The prime factorization of 56 has how many 2's?
5. Find $1^5/_{24} \div 5/_{6}$
6. A barrel has 28 gallons of water in it when it is $4/_{5}$ full. How much can it hold when full?
7. Solve $220 = p \times 4$
8. Solve $294 \div q = 6$
9. Reduce the fraction $6/_{30}$
10. Reduce the fraction $45.6/_{108}$
11. Write 55.20 as a mixed number.
12. Write the fraction $4/_{40}$ as a decimal.
13. What is the least common multiple of 30 and 21?
14. What is the greatest common divisor of 30 and 21?
15. A number minus $1/_{42}$ equals $1/_{7}$. What is the number?
16. A number divided by 70 equals 10. What is the number?
17. Solve $3 \times (4 + 14 \times 4) + 6 - 4 + 81 \div 3^3 \times 2^4$

[show answers](#)

[show moodle code](#)

Math 20 Test #1

4/10/2015

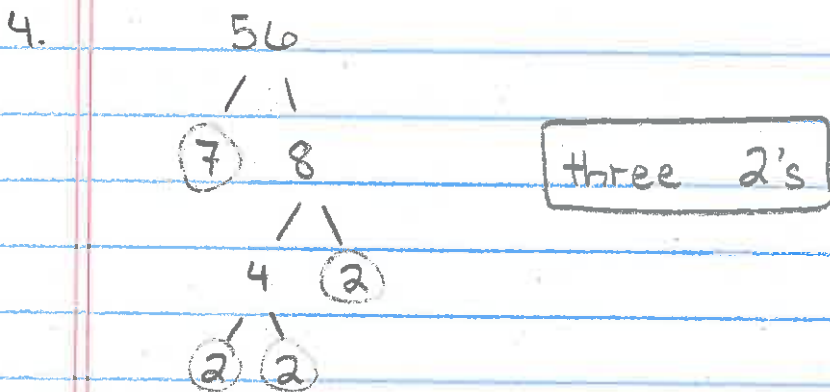
1. $158 \div 43.2 \approx 160 \div 40 = \boxed{4}$

2. Round to thousandths $6,368.\underline{636}8$
 $\approx \boxed{6,368.637}$

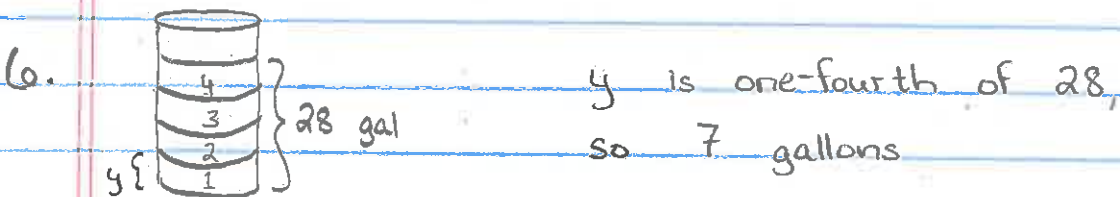
3.

1	56
2	28
4	14
7	8

 $\boxed{\text{eight factors}}$



5. $\frac{15}{24} \div \frac{5}{6} = \frac{3}{4} \frac{15}{24} \cdot \frac{6}{\cancel{7}^1} = \boxed{\frac{3}{4}}$



the entire barrel is five times that, so $\boxed{35 \text{ gal}}$

$$7. \quad 220 = p \cdot 4$$

$$\div 4 \qquad \div 4$$

$$\boxed{55} = p$$

$$\begin{array}{r} 55 \\ 4 \overline{) 220} \\ \underline{-20} \\ 20 \\ \underline{-20} \\ 0 \end{array}$$

$$8. \quad 294 \div q = 6$$

$$\cdot q \qquad \cdot q$$

$$294 = 6 \cdot q$$

$$\div 6 \qquad \div 6$$

$$\boxed{49} = q$$

$$\begin{array}{r} 49 \\ 6 \overline{) 294} \\ \underline{-24} \\ 54 \\ \underline{-54} \\ 0 \end{array}$$

$$9. \quad \frac{6}{30} \div 6 = \boxed{\frac{1}{5}}$$

$$10. \quad \frac{45.6}{108} \cdot \frac{10}{10} = \frac{456}{1,080} \div 2 = \frac{228}{540} \div 2 = \frac{114}{270} \div 2$$

$$= \frac{57}{135} \div 3 = \boxed{\frac{19}{45}}$$

$$11. \quad 55.2 = 55 \frac{2}{10} = \boxed{55 \frac{1}{5}}$$

$$12. \quad \frac{4}{40} = \boxed{0.1}$$

$$\begin{array}{r} .1 \\ 40 \overline{) 4.0} \end{array}$$

13. $\begin{array}{c} 30 \\ 3 \diagdown 10 \end{array}$ $\begin{array}{c} 21 \\ \cancel{3} \diagdown 7 \end{array}$ ignore the overlap 3

$$\text{LCM} = 3 \cdot 10 \cdot 7 = \boxed{210}$$

$$14. \quad \text{GCD} = \boxed{3}$$

(no common factors in 10, 7)

