

Math 30 Exam 2 Review **NO WORK=NO CREDIT**

You may not use a calculator on this exam. Circle or box your answer. Write neatly Show all work.

1. Simplify the fraction to lowest terms, if possible. $\frac{16wx^3}{24x^3y}$

2 Write a fraction that is equivalent to $\frac{5}{6}$ whose denominator is 54.

3. Perform the indicated operations.(simplify)

a) $\left(\frac{3}{8}\right)\left(-\frac{2}{3}\right)\left(-\frac{12}{27}\right)$

b) $\left(\frac{5}{8x}\right)\left(\frac{2x^3y}{15}\right)$

c) $\frac{c}{d} \div c$

d) $-12y \div \left(\frac{-3y^2}{10}\right)$

e) $-\frac{3}{4} + \frac{3}{8} + \frac{7}{6}$

f) $2\frac{1}{2} \div \left(-1\frac{5}{8}\right)$

g) $5\frac{1}{2} + 5\frac{3}{4} + 5\frac{1}{6}$

h) $5\frac{1}{10} - \frac{4}{5}$

i) $2\frac{3}{5}\left(-\frac{1}{3}\right)^2 - \frac{1}{15}$

j) $\left|-\frac{3}{16} \div 2\frac{1}{4}\right| + \left(-2\frac{1}{8}\right)$

k) $-\frac{5}{9} + \frac{y}{3}$

l) $\frac{\frac{2}{5} - \frac{1}{3}}{\frac{2}{5} + \frac{1}{3}}$

m) $(-2)^2 + 2[1 - (-8 + 2)]$

n) $1 - |-14 - (-6)|$

o) $\sqrt{\frac{25}{9}} - \sqrt{\frac{64}{81}}$

p) $-\sqrt{0.64}$

q) $\sqrt{250}$

4. Solve the following equations for their given variable.

a) $3d = 24$

b) $-1 = \frac{h}{-2}$

c) $\frac{2}{3} + y = \frac{4}{3}$

d) $\frac{3}{4}y = \frac{1}{2}$

e) $\frac{-2}{15} + y = 3$

5. Explain what is being done and why it is valid. $\frac{5}{8} = \frac{5}{8} \cdot \frac{2}{2} = \frac{10}{16}$

6. To make some draperies, Liz needs $12\frac{1}{4}$ yards of material for the den and $8\frac{1}{2}$ yards for the living room. If the material comes only in 21-yard bolts, how much will be left over after completing both sets of draperies?

7. Circle the following that are equivalent?

a) $\frac{25}{15}$

b) $2\frac{5}{3}$

c) $\frac{125}{15}$

d) $1\frac{2}{3}$

e) $\frac{5}{3}$

8. On the table are 1 and $\frac{3}{4}$ pizzas left. If 7 people want to take home an equal share of the pizza, then what size fraction of the remaining pizza will each person take home? Draw a picture of how you would slice the pizzas.

9. John read 125 of the 400 pages in his book this week. What fraction of his book does he have left?

10. Fill in the blanks.

<u>Decimal form</u>	<u>Mixed form</u>	<u>Written form</u>
a) 1.0025		
b)	$22\frac{3}{100}$	
c)	$\frac{3}{8}$	

11. Round \$32.15625 to the nearest a) thousandth b) cent.

12. Perform the operations.. a) $12 + (-1.2)$ b) $(10.1)(2.5)$

c) $-0.437 \div 0.19$ d) $\frac{(1.3)^2 - 2}{2}$ e) $\sqrt{\frac{64}{49}} + \sqrt{\frac{25}{36}}$

13. Use the power of ten rules for the following. a) $100,000(325.62)$ b) $0.2 \div 1,000$

14. Find the quotient to the nearest thousandth. $1.2 \overline{)0.02201}$

15. Perform the indicated operations by either writing all numbers in decimal form or writing all numbers in fraction. Then circle the correct answer.

$$\left(-\frac{3}{5}\right)(5.2) - 6.4$$

16. A cook has found that each squeeze of an orange puts out 0.8 ounces of liquid. How many squeezes of the orange will it take to give 4.8 ounces of liquid?

17. Solve each equation. a) $x - 6.2 = 5.5$ b) $-2.4x = 0.3$

18. Circle the following that are equivalent?

a) $\frac{25}{15}$ b) $1.\bar{3}$ c) $\frac{125}{15}$ d) $1\frac{2}{3}$ e) $\frac{5}{3}$

19. Find the Celsius temperature reading if the Fahrenheit reading is 89.6° ?

$$C = \frac{5}{9}(F - 32)$$

Answers:

1. $\frac{2w}{3y}$ 2. $45/54$ 3 a) $1/9$ b) $\frac{x^2y}{12}$ c) $1/d$ d) $40/y$ e) $19/24$ f) $-20/13$
 g) $16\ 5/12$ h) $43/10$ i) $2/9$ j) $-49/24$ k) $\frac{-5+3y}{9}$ l) $1/11$ m) 18 n) -7 o) $7/9$ p) -0.8 q) $5\sqrt{10}$

4.a)8 b)2 c) $2/3$ d) $2/3$ e) $47/15$

5. look in your notes chpt. 4 page. 2

6. Answer: $1/4$ yds

7. a, d, e

8. $1/4$ per person. Ask about the drawing.

9. $11/16$

10. a) $1\ 1/400$, one and twenty-five ten-thousandths

b) 22.03 , twenty-two and three hundredths

c) 0.375 , three hundred seventy-five thousandths

11. a) $\$32.156$

b) $\$32.16$

12. A) 10.8 b) 25.25

c) -2.3

d) -0.155

e) $83/42$

13 . a) $32,562,000$

b) 0.0002

4. 0.018

15. -9.52 or $-9\ 13/25$

16. 6 squeezes

17.a) 11.7 b) -0.125

18. a, d, e

19. 40.96 degrees Celsius.

