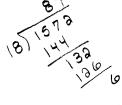
Part I - Circle the best answer for each problem. Each problem is worth 2 points. Partial credit may be awarded for correct work or explanations. CALCULATORS ARE ALLOWED ON THIS PORTION OF THE TEST ONLY.

- 1. Compute $3.87 + 5.23 \times (-2.97)$.
 - (a) -11.6631
 - (b) -27.027
 - (c) 27.027
 - (d) 19.4031
- 2. Write $\frac{1572}{18}$ as a mixed number in lowest terms.







3. A rectangular garden has dimensions $3\frac{7}{8}$ meters by $2\frac{3}{4}$ meters. Find the area of the garden. Write your answer as a mixed number in lowest terms.

(a)
$$6\frac{5}{8}$$
 m²

(b)
$$10\frac{21}{32}$$
 m²

(c)
$$12 \,\mathrm{m}^2$$

(d)
$$\frac{53}{8}$$
 m²

4. Combine like terms:

$$3.89x - 9.773y + 2.951x + 6.9y$$

(a)
$$6.841x - 2.873y$$

(b)
$$6.841x + 16.67y$$

(c)
$$0.939x - 16.67y$$

- (d) 2.873x + 6.841y
- 5. Compute $-\frac{14}{72} + \frac{82}{91}$. Write your answer in lowest terms.

(a)
$$\frac{3589}{3276}$$

$$(b)\frac{2315}{3276}$$

(c)
$$\frac{68}{163}$$

(d)
$$\frac{96}{163}$$

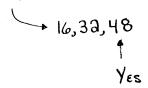
$\frac{\text{Math 085 - Test 4b}}{\text{November 14, 2013}}$

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 $a\frac{5}{8} = \frac{21}{8}$

Part II - Circle the best answer for each problem. Each problem is worth 2 points. Partial credit may be awarded for correct work or explanations. Calculators ARE NOT ALLOWED ON THIS PORTION OF THE TEST.

- 1. Find the least common multiple of 8, 16, and 12.
 - (a) 4
 - (b) 48
 - (c) 1536
 - (d) 32



 $X = \frac{3}{5} - \frac{1}{4} = \frac{12}{20} - \frac{5}{20} = \frac{17}{20}$

- 2. Add and write your result as an improper fraction in lowest terms:

 - (c) $\frac{5}{4}$
- 3. Solve for x: $x + \frac{1}{4} = \frac{3}{5}$

(a)
$$x = \frac{17}{20}$$

(b)
$$x = \frac{3}{20}$$

(c)
$$x = 2$$

4. Solve for w: $\frac{3}{4}w - \frac{1}{8} = \frac{1}{2}$

$$(a) w = \frac{5}{6}$$

(b)
$$w = \frac{4}{15}$$

(c)
$$w = 6$$

(d)
$$w = -\frac{1}{8}$$

$$\frac{3}{4}\omega = \frac{1}{2} + \frac{1}{8} = \frac{4}{8} + \frac{1}{8} = \frac{5}{8}$$

$$\frac{3}{4}\omega = \frac{5}{8}$$

$$\omega = \frac{5}{82} \left(\frac{4}{3} \right) = \frac{5}{6}$$

5. Convert $-12\frac{3}{4}$ to an improper fraction.

(a)
$$-\frac{51}{4}$$

(b) $-\frac{45}{4}$

$$13\frac{3}{4} = \frac{48+3}{4} = \frac{51}{4}$$

(b)
$$-\frac{45}{4}$$

(c)
$$-\frac{15}{4}$$

(d)
$$-\frac{36}{4}$$

6. Add and write your result as a mixed number in lowest terms:

(a)
$$8\frac{3}{6}$$

(b)
$$9\frac{1}{6}$$

(c)
$$9\frac{1}{2}$$

(d)
$$\frac{56}{6}$$

7. Subtract and write your result as a mixed number in lowest terms:

(a)
$$4\frac{5}{8}$$

(b)
$$3\frac{5}{8}$$

(c)
$$-4\frac{3}{8}$$

(d)
$$4\frac{3}{8}$$

8. A recipe calls for $1\frac{2}{3}$ cups of sugar. How much sugar is required for $\frac{3}{4}$ of the recipe?

(a)
$$\frac{5}{4}$$
 cups

(b)
$$\frac{9}{20}$$
 cups

(c)
$$\frac{29}{12}$$
 cups

$$\frac{3}{4} \times \frac{5}{3} = \frac{5}{4}$$

- 9. Which one of these is the correct word name for 52.7?
 - (a) Fifty-two point seven
 - (b) Fifty-two and seven hundredths
 - (c) Fifty-two point seven tenths
 - (d) Fifty-two and seven tenths
- 10. Which one of these improper fractions is equivalent to 45.009?
 - (a) $\frac{459}{10000}$
 - (b) $\frac{45.009}{10}$
 - \bigcirc $\frac{45009}{1000}$
 - (d) $\frac{459}{10}$
- 11. Which one of these numbers is greater than -0.5647?
 - (a) -1.0
 - (b) -0.565
 - (c) -0.5648
 - (d) -0.56
- 12. Multiply: 9.876×0.001
 - (a) 9876

MOVE DECIMAL PT LEFT 3 PLACES.

 $45 \frac{9}{1000} = \frac{45009}{1000}$

- (b) 0.09876
- (c) 987.6
- (d) 0.009876

- 13. Round 89.5428 to the nearest hundredth.
 - (a) 90
 - (b) 100
 - (c) 89.54
 - (d) 89.543
- 14. Which of the following is a reasonable estimate for $9\frac{1}{4} 17\frac{1}{9}$?

 - (c) -7
 - (d) 8
- 15. Multiply: 13.9008×1000
 - (a) 0.0139008
- MOVE DECIMAL PT 3 PLACES RIGHT

- (b) 1,390.08
- (c) 13,900.8
- (d) 0.139008
- 16. John hiked $\frac{3}{5}$ mi, took a 5-min break, and then hiked another $\frac{3}{8}$ mi. How far did John hike in all?
 - (a) $\frac{6}{13}$ mi
 - (b) $\frac{39}{40}$ mi (c) $\frac{3}{7}$ mi

 - (d) $1\frac{1}{8}$ mi

 $\frac{3}{5}$ $+\frac{3}{8}$

$$=\frac{24}{40}+\frac{15}{40}=\frac{39}{40}$$

 $\approx 9 - 17 = -8$

17. Solve for
$$x$$
: $20 = 6 - \frac{2}{3}x$

$$(a) x = -21$$

(b)
$$x = -\frac{28}{3}$$

(c)
$$x = 10$$

(d)
$$x = -\frac{20}{6}$$

$$-\frac{3}{3}X + 6 = 20$$

$$-\frac{a}{3}X = 14$$

$$X = \frac{14}{1} \left(-\frac{3}{4} \right) = -21$$

18. Write $\frac{46}{4}$ as a mixed number in lowest terms.

(a)
$$11\frac{1}{4}$$

(b)
$$10\frac{2}{4}$$

(c)
$$11\frac{1}{2}$$

(d)
$$46\frac{1}{4}$$

. 19. Divide and write your result as a mixed number in lowest terms: $2\frac{1}{3} \div 1\frac{3}{4}$

 $1 \frac{a}{4} = 1 \frac{1}{a}$

(a)
$$2\frac{1}{4}$$

(b)
$$4\frac{1}{12}$$

(c)
$$\frac{12}{49}$$

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

$$\frac{7}{3} \div \frac{7}{4} = \frac{7}{3} \times \frac{4}{7}$$
$$= \frac{4}{3} = \frac{1}{3}$$

20. Evaluate x + 2y when $x = 5\frac{1}{4}$ and $y = \frac{7}{8}$.

(a)
$$\frac{15}{8}$$

(c)
$$6\frac{1}{8}$$

(d)
$$\frac{7}{4}$$

$$= 5 \frac{1}{4} + 1 \frac{3}{4} = 6 \frac{4}{4}$$