MA 102 COMPETENCY TEST - FORM A

Circle the letter of the correct answer.

1. $17\frac{3}{8}-6\frac{3}{4}=$ (A) $11\frac{5}{8}$ (B) $11\frac{3}{8}$ (C) $10\frac{5}{8}$ (D) $10\frac{3}{8}$

2. $\frac{2}{3}\times 2\frac{2}{5}=$ (A) $1\frac{3}{5}$ (B) $1\frac{2}{15}$ (C) $\frac{8}{15}$ (D) $2\frac{4}{15}$

3. $3\frac{5}{6}+10\frac{7}{9}=$ (A) $14\frac{5}{36}$ (B) $14\frac{11}{18}$ (C) $13\frac{11}{36}$ (D) $13\frac{11}{18}$

4. $\frac{3}{4}\div 1\frac{2}{3}=$ (A) $\frac{9}{20}$ (B) $\frac{3}{10}$ (C) $\frac{15}{8}$ (D) $\frac{9}{8}$

5. $2\frac{7}{8}-5\frac{3}{8}=$ (A) $-3\frac{1}{2}$ (B) $-2\frac{1}{2}$ (C) $-3\frac{1}{4}$ (D) $-2\frac{1}{4}$

6. $\frac{430}{6}$ expressed as a mixed number is (A) $71\frac{5}{6}$ (B) $71\frac{2}{3}$ (C) $70\frac{2}{3}$ (D) $70\frac{1}{2}$

7. If $x+5=\frac{3}{4}$, then x = (A) $-4\frac{1}{4}$ (B) $-5\frac{3}{4}$ (C) $-4\frac{3}{4}$ (D) $5\frac{3}{4}$

8. If x – 3 > 7, then (A) $x < 4$ (B) $x > 4$ (C) $x < 10$ (D) $x > 10$

9. 5.7 – .002 = (A) 5.698 (B) 5.68 (C) 5.5 (D) 4.5

10. 3.02 × .105 = (A) .03171 (B) .3171 (C) .453 (D) .0453

(OVER)

11. $.003468 \div 1.7 =$ (A) .0204 (B) .0024 (C) .00204 (D) .024

12. $-53 - (-87) =$ (A) 140 (B) 34 (C) −34 (D) −140

13. $25 - 2(18 - 7) =$ (A) 3 (B) 253 (C) 47 (D) −25

14. $.27 \times 10^3 =$ (A) 27 (B) 270 (C) 2700 (D) 27000

15. $5\frac{1}{2}\%$ expressed as a fraction is (A) $\frac{55}{10}$ (B) $\frac{55}{100}$ (C) $\frac{55}{1000}$ (D) $\frac{55}{10000}$

16. $\frac{3}{8} =$ (A) .375% (B) 3.75% (C) 37.5% (D) 375%

17. Carol must pay Master Charge $1\frac{1}{2}\%$ per month on her unpaid balance of $140. What is that month's interest charge?

(A) $.21 (B) $2.10 (C) $21 (D) $25.20

18. Joe paid $147 (without tax) for a leather coat at a 30%-off sale. What was the pre-sale price?

(A) $191.10 (B) $195 (C) $199.50 (D) $210

19. The ratio of length to width in a certain rectangle is 7 to 5. If the width is 35, what is the length?

(A) 25 (B) 30 (C) 42 (D) 49

20. If large oranges are 4 for 89¢ and smaller ones are 6 for 89¢, how much will you save on the purchase if you get 2 dozen of the smaller, rather than the larger oranges?

(A) $1.78 (B) $1.36 (C) $.89 (D) $.44