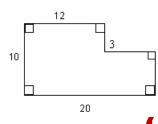
Sample Questions and answers:

- 1.6.09 4.693 =
 - (A) 1.397
 - (B) 1.403
 - (C) 1.407
 - (D) 1.497
 - (E) 2.603



- 2. What is the area of the region enclosed by the figure above?
 - (A) 116
 - (B) 144
 - (C) 176
 - (D) 179
 - (E) 284
- 3. If p = 0.2 and n = 100, then $\sqrt{\frac{p(1-p)}{n}}$



- (B) $\sqrt{0.02} 0.02$
- (C) 0
- (D) 0.04
- (E) 0.4
- 4. If each of 4 subsidiaries of Corporation *R* has been granted a line of credit of \$700,000 and each of the other 3 subsidiaries of Corporation *R* has been granted a line of credit of \$112,000, what is the average (arithmetic mean) line of credit granted to a subsidiary of Corporation *R*?
 - (A) \$1.568,000
 - (B) \$448.000
 - (C) \$406,000
 - (D) \$313,600
 - (E) \$116,000
- 5. If x is a number such that $x^2 3x + 2 = 0$ and $x^2 x 2 = 0$, what is the value of x?
 - (A) -2
 - (B) -1

(C) 0 (D) 1 (E) 2	
6. In traveling from a dormitory to a certain city, a stu	dent went $\frac{1}{5}$ of the way by foot, $\frac{2}{3}$ of the way by bus,
and the remaining 8 kilometers by car. What is the	distance, in kilometers, from the dormitory to the city
(A) 30 (B) 45 (C) 60 (D) 90 (E) 120	
	bounds. What is the greatest possible number of people in the average (arithmetic mean) weight of fall the riders ners being 215 pounds?
(A) 7 (B) 8 (C) 9 (D) 10 (E) 11	
8. After paying a 10 percent tax on all income over \$3 the income before taxes?	,000, a person had a net income of \$12,000. What was
(A) \$13,300 (B) \$13,000 (C) \$12,900 (D) \$10,000 (E) \$9,000	
9. $1-[2-(3-[4-5]+6)+7]$	
(A) -2 (B) 0 (C) 1 (D) 2 (E) 16	
purchased together, the price is \$239. The amount approximately what percent of the total price of the (A) 14% (B) 16% (C) 29% (D) 33%	ice of a special lens is \$69. When the camera and lens are saved by purchasing the camera and lens together is e camera and lens when purchased separately?
(E) 86% 11. If 0.497 mark has the value of one dollar, what is t	the value to the nearest dollar of 350 marks?

(C) \$524

(A) \$174

(D) \$696

(B) \$176 (E) \$704

12. A rig	ght cylindrical co	ontainer w	ith radiu	ıs 2 mete	ers and h	eight 1	meter is	s filled t	o capaci	ity with o	oil. How	V
many empty right cylindrical cans, each with radius $\frac{1}{2}$ meter and height 4 meters, can be filled to capacity												
	the oil in this co				2							
(A) 1 (D) 8			(B) 2 (E) 16		(C) 4							
13. If a sequence of 8 consecutive odd integers with increasing values has 9 as its 7th term, what is the sum of the terms of the sequence?										n of		
(A) (D)		(B) 32 (E) 44		(C) 36								
	ctangular floor is								each of t	the four	edges. I	f the
(B) <i>t</i> (C) <i>t</i> (D) ($mn - p (m + n)$ $mn - 2p(m + n)$ $mn - p^{2}$ $(m - p)(n - p)$ $(m - 2p)(n - 2p)$						O	S) "		
respe	king alone, R can ective rates, can plete one of thes	complete										
(A) (D) ((B) 12	(E) 3	(C) 9								
The	mily made a dow balance with into unt of interest pa	erest was	paid in 2	23 mont	ily payn	ents of	\$16 eac					
(A) (B) 1 (C) 1 (D) 1 (E) 2	12% 14% 16%	C	け									
17. If $x = -\frac{1}{2}$	$\neq 0$ and $x = \sqrt{4x}$	$(y-4y^2)$, then, ir	n terms o	of $y, x =$							
(A) 2 (B) y	y											
(D)	$\begin{array}{c} 2 \\ 4y^2 \\ 1-2y \end{array}$											

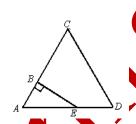
18. Solution *Y* is 30 percent liquid *X* and 70 percent water. If 2 kilograms of water evaporate from 8 kilograms of solution *Y* and 2 kilograms of solution *Y* are added to the remaining 6 kilograms of liquid, what percent

of this new solution is liquid X?

- (A) 30%
- (B) $33\frac{1}{3}\%$
- (C) $37\frac{1}{2}\%$
- (D) 40%
- (E) 50%

$$19.\frac{1}{\frac{1}{0.03} + \frac{1}{0.37}} =$$

- (A) 0.004
- (B) 0.02775
- (C) 2.775
- (D) 3.6036
- (E) 36.036



20. If each side of $\triangle ACD$ above has length 2 and if AB has length 1, what is the area of region BCDE?

- (A) $\frac{9}{4}$
- (B) $\frac{7}{4}\sqrt{3}$
- (D) $\frac{7}{2}\sqrt{3}$

- 2. C 3. D 4. B 5. E 6. C

- 7. D 8. B 9. D

10. A 11. E 12. C 13. B 14. E 15. A 16. D 17. A 18. C 19. B 20. B