Math 095 Final Exam Review

(unless listed in the key on the reverse side, the solutions may be found in the back of the textbook)

FO F1	
50-51	1, 2, 7, 8, 9, 10, 16-19 all, 22, 23, 28, 32 & 33
96	24-28 all
99-100	4, 6-13 all, 18-21 all
.54	1-10 all
201-02	1-26 all, 29, 30
202	4-8 all
250	34-36 all
250-51	13, 15, 17, 18, 24, 25 & 26
291	1-11 all
332-33	2, 5, 14, 16, 17, 18, 30, 40 & 43
122	1-12 all
423-24	6-10 all, 17, 19 & 20
479-80	4, 5, 7-14 all, 19-25 all
532	3, 9-13 all
576-77	3, 11, 13, 31 & 33
577-78	1, 2, 3, 9 & 12
	99-100 54 201-02 02 50 50-51 91 332-33 22 423-24 479-80

Proofs to Practice (solutions may be found in the back of the book)

Chapter 2, Section 2.6	p. 88	#9
Chapter 2, Section 2.6	p. 89	#27
Chapter 2 Review	p. 97	#s 29-34 (one proof)
Chapter 3, Section 3.3	p. 122	# 59
Chapter 3 Test	p. 153	#11
Chapter 4 Review	p. 200	29, 31 & 39
Chapter 6, Section 6.3	p. 272	#35
Chapter 6, Section 6.3	p. 273	#37
Chapter 6 Test	p. 290	#18

^{. *}See the reverse side for solutions

Students should be prepared to do all of the following constructions.

- Copying a segment
- Bisecting a line segment
- Copying an angle
- Bisecting an angle
- Constructing a perpendicular to a line from an external point
- Constructing a perpendicular through a point on a line

Three of these constructions will be on the final exam. Students should bring a compass, straight edge, and scientific calculator to the final exam.

All answers may be found in the back of the textbook with the exception of the following questions:

Chapter 2 Review

Questions 29-34

29–34.	
Statements	Reasons
1. $QS = 42$	1. Given
	(Exercise 29)
2. QR + RS = QS	2. Segment Addition
	<u>Postulate</u>
	(Exercise 30)
3. $(x+3)+2x=42$	3. Substitution
	(Exercise 31)
4. $3x + 3 = 42$	4. <u>Simplify</u>
	(Exercise 32)
5. $3x = 39$	5. Subtraction
	Property of
	<u>Equality</u>
	(Exercise 33)
6. $x = 13$	6. Division Property
	of Equality
	(Exercise 34)

Chapter 5 Review

Question 34: not possible, 15 > 5 + 8 Question 36: between 1 foot and 25 feet

Chapter 7 Review

Question 2: 36 degrees

Question 14: $\Delta X YZ \sim \Delta PQR$, scale factor is 2:3

Question 16: 45 feet

Chapter 7 Review question 18:

Since $\overline{RP} \parallel \overline{SG}$, it follows that $\angle R \cong \angle TSG$ and $\angle R \cong \angle TSG$ by the Corresponding Angles Converse. Therefore, $\Delta RPT \sim \Delta SGT$ by the AA \sim Postulate.

Question 30: 77 Question 40: 11.25

Chapter 9 Review:

Question 2: 17

Question 4: $9\sqrt{3}$

Question 6: $5\sqrt{2}$

Question 8: x = 7, $y = 7\sqrt{3}$

Question 10: $\sin A = 4/5$, $\cos A = 3/5$, $\tan A = 4/3$

Question 12: x = 33.1