

## Answers to Fall 2010 Tests – MAT 1015

### Test 1

1. S 2. 180 3. 360 4. 180 5. Right 6. Obtuse 7. Perpendicular 8. Scalene 9.  $2.45 \times 10^7$   
10.  $80.3 \times 10^{-9}$  11. 1.5 Gigavolts 12. 38.1 13. 850 14. Answer varies  
15. Answer varies 16. Varies:  $\triangle BAE$  or  $\triangle ACB$  17.  $90^\circ$  18.  $50^\circ$  19.  $50^\circ$   
20. a) Acute b) Equilateral 21. a) Obtuse b) Isosceles 22. 7009.13 yd<sup>2</sup> 23. 462 ft<sup>2</sup>  
24. a)  $1260^\circ$  b)  $140^\circ$  25. 242.4 m 26. 384 in<sup>2</sup> 27. \$241.89

### Test 2

1. Parallel lines 2. 180 3. size; shape 4.  $90^\circ$  5.  $9^\circ$  6.  $99^\circ$  7. Answer varies 8. Answer varies  
9. a)  $53^\circ$  b)  $53^\circ$  c)  $127^\circ$  d)  $127^\circ$  e)  $37^\circ$  f)  $53^\circ$  g)  $53^\circ$  h)  $90^\circ$  10. Complementary  
11. Vertical 12. Alternate Exterior 13. Corresponding 14.  $62^\circ$  15.  $\overline{AC}$  16.  $\overline{AB}$  17. a) 15  
b)  $60^\circ$  c)  $120^\circ$  d)  $60^\circ$  e)  $30^\circ$  f)  $150^\circ$  g)  $120^\circ$  18. Yes 19. No 20. Yes 21. a) 19.6  
b)  $16.2^\circ$  c)  $73.8^\circ$  22. 3989.82 in<sup>2</sup> 23. 18.375 in<sup>3</sup> 24. 219 in<sup>2</sup> (or 235.5 in<sup>2</sup> depending on labeling)

### Test 3

1. Right 2. Similar 3. Proportional 4. Congruent 5. Right 6. 39 m 7. a) 3.5 b) 4.7 c)  $\angle IKG$   
d)  $\angle KIG$  e)  $\angle KGI$  8. a) SAS b) None c) SSS 9. a) 77 b) 23.0 c) 37 10. a) 0.8910  
b) 0.4000 c) 0.1374 d) 1.0724 e) 3.1190 f) 1.9530 11. a) 3.5 b) 2 c)  $115^\circ$  d)  $65^\circ$  e)  $65^\circ$   
12. 15.09 ft 13.  $25.9^\circ$  14.  $69.3^\circ$  15.  $88.6^\circ$  16. 13.9 in.

### Test 4

1.  $\frac{7}{25}$  2. 6.24 3. 0.7454 4. 22.6 5. 4.41 6. a)  $32^\circ$  b)  $58^\circ$  7. 0.9912 8. 0.5476  
9. 3.2709 10. 1.4945 11. 0.4942 12. 1.1434 13. 6.89 14. 2.38 15. 5.34 16. a) 21 b)  $\frac{21}{29}$   
c)  $\frac{20}{29}$  d)  $\frac{21}{20}$  e)  $\frac{20}{21}$  f)  $\frac{29}{21}$  g)  $\frac{29}{20}$  h)  $46.4^\circ$  i)  $43.6^\circ$  17.  $26.0^\circ$  18.  $44.6^\circ$  19.  $78.2^\circ$   
20. a)  $52^\circ$  b) 8.59 c) 13.96 21.  $21.346^\circ$  22.  $76^\circ 49' 26''$  23.  $56.7^\circ$  24. a) 36,960 ft b) 100.4 ft  
c) 3313 ft d)  $5.1^\circ$