

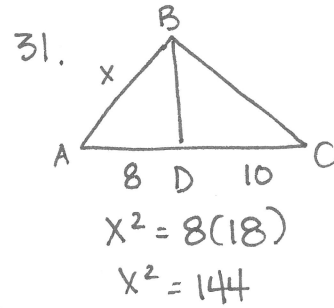
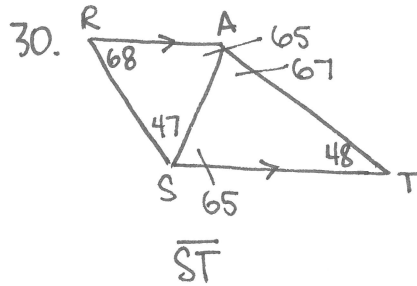
# Geometry June 2014

## Part 1

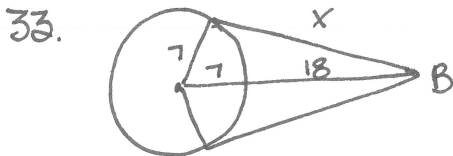
- |      |      |       |       |       |       |       |
|------|------|-------|-------|-------|-------|-------|
| 1. 3 | 5. 3 | 9. 3  | 13. 2 | 17. 2 | 21. 3 | 25. 2 |
| 2. 1 | 6. 2 | 10. 4 | 14. 2 | 18. 1 | 22. 4 | 26. 3 |
| 3. 2 | 7. 2 | 11. 3 | 15. 3 | 19. 1 | 23. 4 | 27. 2 |
| 4. 3 | 8. 1 | 12. 4 | 16. 4 | 20. 1 | 24. 3 | 28. 1 |

## Part 2

29.  $B(5,1) \xrightarrow{R_{90}} B'(-1,5)$   
 $C(-3,-2) \rightarrow C'(2,-3)$



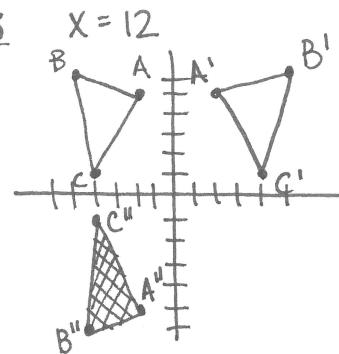
32.  $lwh = lwh$   
 $5 \cdot 5 = 10w$   
 $25 = 10w$   
 $2.5 = w$



$x^2 + 7^2 = 25^2$   
 $x^2 + 49 = 625$   
 $x^2 = 576$   
 $x = 24$

34.  $\left(\frac{3}{2}\right)^2 = \frac{27}{A}$   
 $\frac{9}{4} = \frac{27}{A}$   
 $9A = 108$   
 $A = 12$

## Part 3

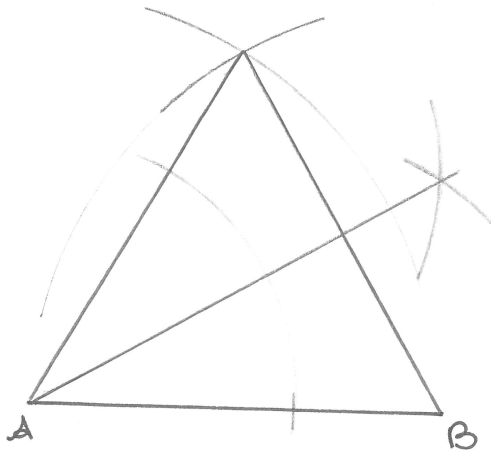


36. SKIP

## Part 4

38.  $m \overline{JK} = -\frac{3}{2}$        $d_{ML} = \sqrt{36+16}$   
 $m \overline{KL} = \frac{1}{2}$                        $= \sqrt{52}$   
 $m \overline{LM} = -\frac{3}{2}$                        $d_{KL} = \sqrt{9+36}$   
 $m \overline{JM} = \frac{1}{2}$                                $= \sqrt{45}$

37.



- JKLM is a parallelogram since opposite sides have equal slopes making parallel lines.
- since not all sides are congruent JKLM is not a rhombus.