

Geometry Practice Answers // Mr. Fitch // 2016-2017

p766 #1-3

30 points each

1. 32
2. 6
3. about 7.9

p767 #6, 7, 12, 13, 15, 18, 19, 21, 35-38 [27]

8 points each

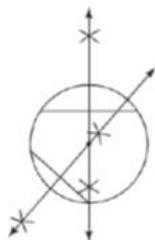
- | | | |
|---------|--------------------------------|-------------|
| 6. 120 | 18. 78 cm | 36. 3 : 4 |
| 7. 47 | 19. 14.2 cm | 37. 9 : 16 |
| 12. 4.8 | 21. All four are congruent. | 38. 27 : 64 |
| 13. 3.6 | 35. about 390 in. ² | |
| 15. No | | |

27. 57.5

p776 #8-10, 13-16, 28, 30, 31, 40 [18] p784 #1, 2, 4

6 points each

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|--------|-----------|-----|
| 8. 14 | 14. 5.4 | 28. |
| 9. 8 | 15. 20.8 | |
| 10. 10 | 16. 12 cm | |
| 13. 6 | | |



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|---------|
| 30. 108 |
| 31. 90 |
| 40. B |

1. $\angle A$ intercepts \widehat{BD} .
2. $\angle D$ intercepts \widehat{ABC}
4. Answers may vary. †

p784 #6-13, 16-18, 24, 40, 41

6 points each

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|-----------------------------|---------------------------------------|-----------------------|-------------------------------|
| 6. 58 | 10. $a = 112, b = 120, c = 38$ | 16. 123 | 24. $a = 22, b = 78, c = 156$ |
| 7. 180 | 11. $a = 101, b = 67, c = 84, d = 80$ | 17. $y = 130, x = 65$ | 40. A |
| 8. $a = 218; b = 109$ | 12. $y = x - 36$ | 18. $f = 130, e = 65$ | 41. D |
| 9. $a = 54, b = 30, c = 96$ | 13. $a = 85, b = 47.5, c = 90$ | | |

p794 #5, 8-13, 53-55

10 points each

5. A secant is a line that intersects a circle at two points; a tangent is a line that intersects a circle at one point.

- | | | |
|-----------------------|----------------------|----------|
| 11. 60 | 8. 46 | 53. 5.8 |
| 12. $x = 115, y = 74$ | 9. 50 | 54. 12.8 |
| 13. $x = 72, y = 36$ | 10. $x = 60, y = 70$ | 55. 5.8 |

p795 #15-20, 24, 25, 33 [32]

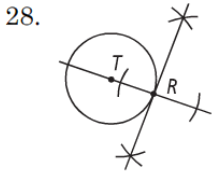
10 points each

15. 15 18. 3.5 24. 26.7
 16. 11.5 19. $x = 25.8, y \approx 12.4$ 25. 16.7
 17. 13.2 20. $x = 5.3, y = 2.9$ 33. $x \approx 8.9, y = 2$

32. $x \approx 10.7, y = 10$

p768 #28

100 points each

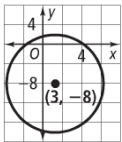


Draw line \overline{TR} . At point R , mark two arcs equidistant from R . Construct the perpendicular bisector of the segment between the two arcs at R .

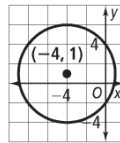
p801 #8-10, 13, 17-21, 26-28, 34-36 [44, 45]

6 points each

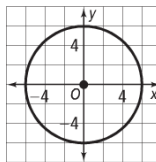
8. $(x - 2)^2 + (y + 8)^2 = 81$ 18. $(x - 4)^2 + (y + 4)^2 = 4$
 9. $x^2 + (y - 3)^2 = 49$ 19. $(x + 2)^2 + (y - 6)^2 = 16$
 10. $(x - 0.2)^2 + (y - 1.1)^2 = 0.16$ 20. $(x - 1)^2 + (y - 2)^2 = 17$
 13. $(x + 9)^2 + (y + 4)^2 = 5$ 21. $(x - 7)^2 + (y + 2)^2 = 52$
 17. $(x + 4)^2 + (y - 2)^2 = 16$
 26. The center of the circle is $(3, -8)$, and its radius is $\sqrt{100} = 10$.



27. The center of the circle is $(-4, 1)$, and its radius is $\sqrt{25} = 5$.



28. The center of the circle is $(0, 0)$, and its radius is $\sqrt{36} = 6$.



34. $(x - 2)^2 + y^2 = 9$
 35. $(x - 2)^2 + (y - 2)^2 = 16$
 36. $(x + 1)^2 + (y - 1)^2 = 4$

44. $C = 16\pi; A = 64\pi$
 45. $(x - 4)^2 + (y - 7)^2 = 36$

p802 #37, 38, 60, 61 [46]; p816 #6, 7, 10, 14

12 points each

37. $(x - 4)^2 + (y - 3)^2 = 25$ 6. G
 38. $(x - 5)^2 + (y - 3)^2 = 13$ 7. C
 60. D 10. H
 61. I 14. G

46. x -intercept = 13; y -intercept = $\frac{39}{4}$

Interactive Achievement FMS Fitch G.11, 12 Practice Circles

- 1 C
- 2 D
- 3 B
- 4 D
- 5 D
- 6 D
- 7 A
- 8 6
- 9 65
- 10 6

- 11 C
- 12 B
- 13 B
- 14 B
- 15 C
- 16 A
- 17 B
- 18 5

- 19 B
- 20 A
- 21 D
- 22 D
- 23 D

- 24
- | | |
|--------------------|--------------------|
| (4, 9) | (4, 9) |
| (7, 0) | (13, 0) |
| (4, 9) | (1, 0) |
| (-5, 0) | (4, -3) |

- 25 C
- 26 A
- 27 Center (3, -6)
Point (3, 1)

- 28
- | | |
|--------------------|--------------------|
| (3, -7) | (3, 3) |
| (0, 9) | (3, -5) |
| (8, -2) | (-1, 1) |
| (-2, 9) | (-2, -2) |

- 29 B
- 30 D

p646 #14-16

- 14. 27.7 m²
- 15. 18.0 ft²
- 16. 7554.0 m²

33 points each

p646 #17-19, 24-26 (Area only), 45 [30]

- 17. 311.3 km²
- 18. 128.1 mm²
- 19. 0.8 ft²
- 24. 21.4 ft²
- 25. 282.8 m²
- 26. 3 mi²

30. D
- 45a. 2:3
- 45b. 173.8 in.²

33 points each