

2018~2019学年天津南开区南开大学附属中学高二下学期期中数学试卷(答案)

一、选择题

- 1. C
- 2. D
- 3. D
- 4. B
- 5. C
- 6. A
- 7. A
- 8. C

二、填空题

- 9. 四
- 10. $\frac{5}{12}$
- 11. $y = -2x + 1$ 或 $y = 6x - 7$
- 12. 20
- 13. $\left(-\infty, \frac{2}{e}\right)$
- 14. 204

三、解答题

- 15. (1) $\frac{4}{5}$.
(2) $\{5, 6, 7, 8, 9, 10, 11\}$.
- 16. (1) $\frac{\sqrt{26}}{2}$.
(2) $\left(\frac{2}{3}, +\infty\right)$.
- 17. (1) $y = 5a(1 + 4x - x^2 - 4x^3)$, $(0 < x < 1)$.
(2) 售价为30元时, 月平均利润最大.
- 18. (1) $\frac{1}{10}$.
(2) $\frac{2}{5}$.
(3)

ξ	5	2	-1	-4
P	$\frac{1}{10}$	$\frac{4}{10}$	$\frac{4}{10}$	$\frac{1}{10}$
- 19. (1) 7.
(2) $T_1 = x^{14}$, $T_3 = 84x^9$, $T_5 = 560x^4$, $T_7 = \frac{448}{x}$.
(3) $T_6 = 682 \cdot x^{\frac{3}{2}}$.

