

八年数学参考答案

一、ABCDB ACCDD

二、11. 三角形的稳定性 12. 12 13. 4 14. 4 15. 70° 16. 全等 17. 30° 18. 4

三、19. (1) $3a^8$ (2) $5a^{2n}b^{6n}$ (3) $10x^6+x^3+4x^2$ (4) $-2\frac{3}{5}$

20. 解: $\because AD$ 是高, $\therefore \angle ADC = 90^\circ$,

$\because \angle C = 66^\circ$, $\therefore \angle DAC = 180^\circ - 90^\circ - 66^\circ = 24^\circ$,

$\because \angle BAC = 54^\circ$, $\angle C = 66^\circ$, AE 是角平分线, $\therefore \angle BAO = 27^\circ$, $\angle ABC = 60^\circ$,

$\because BF$ 是 $\angle ABC$ 的角平分线, $\therefore \angle ABO = 30^\circ$,

$\therefore \angle BOA = 180^\circ - \angle BAO - \angle ABO = 123^\circ$.

21. (1) ②4 (2) ② $CM=BN=AM$ 画图略

22. (1) -45 (2) $\frac{81}{4}$

23. (1) 证明 $Rt\triangle AFC \cong Rt\triangle DEB$ (HL) 即可 (2) 28° (3) 2

24. 解: (1) 证明: $\because DE \parallel BC$, $\therefore \angle 1 = \angle B$, $\angle 2 = \angle 3$,

$\because DE$ 平分 $\angle ADC$, $\therefore \angle 1 = \angle 2$, $\therefore \angle B = \angle 3$, $\therefore DB = DC$.

(2) 作 $DG \perp BC$ 于点 G , $\because DB = DC$, $DG \perp BC$, $\therefore GB = \frac{1}{2}BC = \frac{1}{2} \times 7 = 3.5$,

$\therefore GF = GB - BF = 3.5 - 2 = 1.5$, $\because Rt\triangle DGF$ 中, $\angle DFG = 60^\circ$, $\therefore \angle FDG = 30^\circ$

$\therefore DF = 2GF = 2 \times 1.5 = 3$.

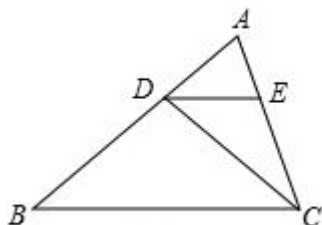
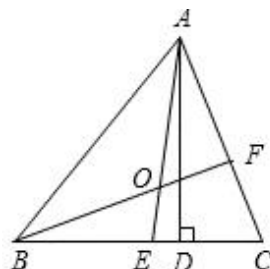


图1

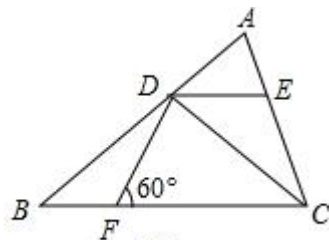


图2

25. (1) 相等。证明 $\triangle ACO \cong \triangle DBO$ 即可 (2) 60°

(3) 成立