

2021年春季学期初中学业水平期中监测 七年级数学参考答案及评分标准

一、选择题(每小题4分,共24分)

题号	1	2	3	4	5	6	7	8
答案	C	A	A	B	D	D	B	C

二、填空题(每小题3分,共18分)

题号	9	10	11	12	13	14
答案	50°	垂线段最短	20cm	1,2	± 2	(3,0)或(-3,0)

三、解答题(共9题,满分58分)

15.(5分)

$$\begin{aligned} \text{解:原式} &= 6 - 1 - \frac{3}{5} \times \frac{5}{3} \quad \dots\dots\dots 4 \text{分} \\ &= 4. \quad \dots\dots\dots 5 \text{分} \end{aligned}$$

16.(6分)

$$\begin{aligned} \text{解:} \because |x-2| + \sqrt{y-1} &= 0 \\ \therefore x-2 &= 0, y-1 = 0 \\ \therefore x &= 2, y = 1 \quad \dots\dots\dots 2 \text{分} \\ \text{原式} &= 5xy^2 - 2x^2y + [3xy^2 - 4xy^2 + 2x^2y] \\ &= 5xy^2 - 2x^2y + 3xy^2 - 4xy^2 + 2x^2y \\ &= 4xy^2 \quad \dots\dots\dots 5 \text{分} \\ \text{把 } x &= 2, y = 1 \text{ 代入原式} &= 4 \times 2 \times 1 = 8 \quad \dots\dots\dots 6 \text{分} \end{aligned}$$

17.(6分)

解:ED // CF.....1分

理由如下:

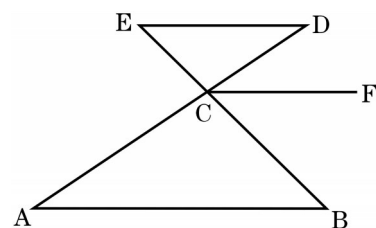
$\because \angle D = \angle A$ (已知)

$\therefore ED // AB$ (内错角相等,两直线平行).....3分

$\because \angle B = \angle FCB$ (已知)

$\therefore CF // AB$ (内错角相等,两直线平行).....5分

$\therefore ED // CF$ (平行线公理).....6分



18.(6分)

$$\begin{aligned} \text{解:} \because 2a-1 \text{ 的平方根是 } \pm 5, 3a+2b-1 \text{ 的立方根是 } 4, \\ \therefore 2a-1 &= 25 \quad \text{①} \quad \dots\dots\dots 2 \text{分} \\ 3a+2b-1 &= 64 \quad \text{②} \quad \dots\dots\dots 4 \text{分} \\ \text{由②} - \text{①} \text{ 得:} \\ a+2b &= 39 \quad \dots\dots\dots 6 \text{分} \end{aligned}$$

19.(7分)

解:(1) $C(0,2)$1分

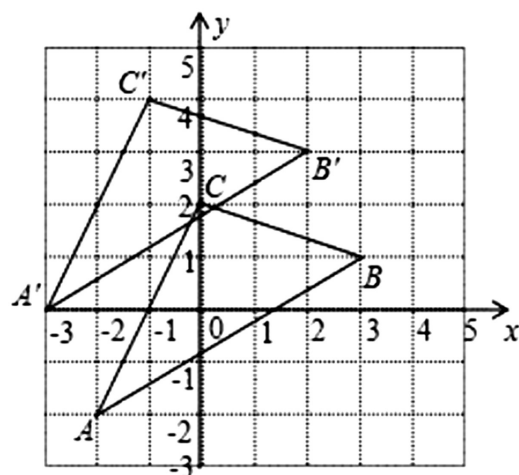
(2)如图所示, $C'(-1,4)$2分

.....5分

(3) $\triangle ABC$ 的面积

$$= 5 \times 4 - \frac{1}{2} \times 2 \times 4 - \frac{1}{2} \times 5 \times 3 - \frac{1}{2} \times 1 \times 3 = 7$$

.....7分



20.(6分)

解: $\angle 1$ 与 $\angle 2$ 相等,.....1分

理由如下:

$\because AD \perp BC, EF \perp BC,$

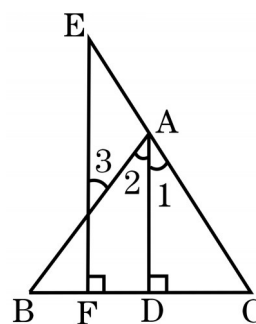
$\therefore AD \parallel EF,$3分

$\therefore \angle 1 = \angle E,$4分

$\angle 2 = \angle 3,$5分

$\therefore \angle E = \angle 3,$

$\therefore \angle 1 = \angle 2.$ 6分



21.(6分)

(1)第十个算式是 $\frac{1}{10 \times 11} = \frac{1}{10} - \frac{1}{11}$ 2分

(2)原式 $= 1 - \frac{1}{2} + \frac{1}{2} - \frac{1}{3} + \frac{1}{3} - \frac{1}{4} + \dots + \frac{1}{2020} - \frac{1}{2021}$ 4分

$$= 1 - \frac{1}{2021} \text{5分}$$

$$= \frac{2020}{2021} \text{6分}$$

22.(每空1分,共6分)

90°

90°

35°

2

70

对顶角相等。

23.(10分)

(1)1101分

(2) $\angle APC = \alpha + \beta$ 2分

理由:如图2,过P作PE // AB交AC于E,3分

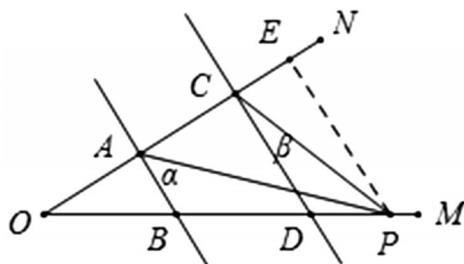
$\because AB \parallel CD$,

$\therefore AB \parallel PE \parallel CD$,4分

$\therefore \alpha = \angle APE, \beta = \angle CPE$,5分

$\therefore \angle APC = \angle APE + \angle CPE = \alpha + \beta$;6分

(3)如图所示,当P在BD延长线上时, $\angle CPA = \alpha - \beta$;8分



如图所示,当P在DB延长线上时, $\angle CPA = \beta - \alpha$ 。10分

