

1

1

$$mx + my + nx + ny$$

2

$$\frac{1}{9}x^2 - \frac{1}{3}xy + \frac{1}{4}y^2$$

①各2点

3

$$28 - 11y + y^2$$

4

$$64a^2 - 25$$

5

$$2a^2 - 5ab + 10a - 15b + 3b^2$$

6

$$x^2 + 2xy + y^2 - 4$$

/12

2

1

2, 3, 5, 7, 11, 13, 17, 19, 23, 29 (102)

2

①

$$2 \times 3^3$$

②

$$2^2 \times 3 \times 13$$

②各2点

③

$$5 \times 7 \times 11$$

7

3

$$12$$

4

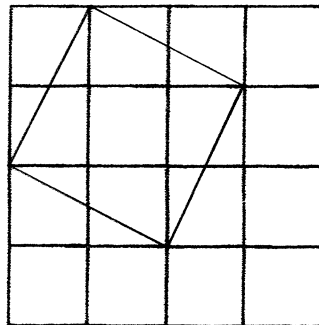
$$168$$

5

35で割ると2の平方

6

イ, ウ, オ



/18

3

1

$$\begin{aligned} & 3.14 \times 102 - 3.14 \times 92 \\ &= 3.14 \times (102 - 92) \\ &= 3.14 \times 10 \\ &= 31.4 \end{aligned}$$

③各2点

2

$$\begin{aligned} & 4.02 \times 3.98 \\ &= (4 + 0.02) \times (4 - 0.02) \\ &= 16 - 0.0004 \\ &= 15.9996 \end{aligned}$$

/6

3

3	$3.2^2 - 2.2^2$ $= (3.2 + 2.2) \times (3.2 - 2.2)$ $= 5.4 \times 1$ $= 5.4$
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4

1	$4a(x+2y)$	2	$(x+\frac{1}{2})(x-\frac{1}{2})$
3	$(\frac{1}{2}x-y)^2$	4	$(x-y)(x+6y)$
5	$9(3a+2)(3a-2)$	6	$x(x+y)^2$
7	$a(b+1)(b-5)$	8	$(a+b-3c)(a-b+3c)$
9	$(b-3)(a+1)(a-1)$		

各2点

/18

5

1	147	2	$-\frac{1}{12}$	3	6
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各2点

/6

6

1	ア	$\sqrt{280} < 17$	1	$-\sqrt{3} < -\frac{3}{2}$	ウ	$0.6 < \sqrt{0.6}$
2	$n = 1, 2, 3, 4, 5, 6, 7, 8, 9$					
3	$n = 9, 10, 11, 12, 13, 14$					
4	$0.\dot{2}8571\dot{4}$			5	$\frac{14}{11}$	

各2点

/14

7

ア	$2n$	イ	$2n+2$
ウ	$4n^2+4n$	エ	$(2n+1)^2$

各2点

/2

8

$$S = \frac{1}{2}\pi(r+a)^2 - \frac{1}{2}\pi r^2$$

$$= \frac{1}{2}\pi(r^2 + 2ar + a^2) - \frac{1}{2}\pi r^2$$

$$= \frac{1}{2}\pi r^2 + \pi ar + \frac{1}{2}\pi a^2 - \frac{1}{2}\pi r^2$$

$$= \pi a(r + \frac{1}{2}a) \dots \textcircled{1} \quad \text{3点}$$

$$l = 2\pi(r + \frac{1}{2}a) \times \frac{1}{2}$$

①. ② 点

$$= \pi(r + \frac{1}{2}a) \quad \text{3点}$$

$$S = al \quad \text{2点}$$

以下加, ? 如西面与A倍可也.

$$al = \pi a(r + \frac{1}{2}a) \dots \textcircled{2}$$

9

1	$15\sqrt{2}$	2	30	3	$\frac{3}{2}$
4	$2\sqrt{3}$	5	-2	6	$6\sqrt{2}$
7	$\frac{3}{2}$	8	$\frac{\sqrt{6}}{3}$		

⑨ 各2点

/16

10

1	12.25	2	0.03875	3	7.75
4	2.45				

⑩ 各2点

/8

得点

/100