

4. 7. 17 テスト 12/21

1. (ア) $(x+3)^2 - 1$

$$= A^2 - 1$$

$$= (A+1)(A-1)$$

$$= \underline{(x+4)(x+2)} \text{ ㉔}$$

(イ) $x^2 + 6x - 1 = 0$

$$x = \frac{-6 \pm \sqrt{36 - 4(-1)}}{2}$$

$$x = \frac{-6 \pm \sqrt{40}}{2}$$

$$\underline{x = -3 \pm \sqrt{10}} \text{ ㉕}$$

(ウ) A. $(a, -3)$ B. $(-2, 3)$

$(a > 0)$

$$x = a - (-2) = a + 2$$

$$y = 3 - (-3) = 6$$

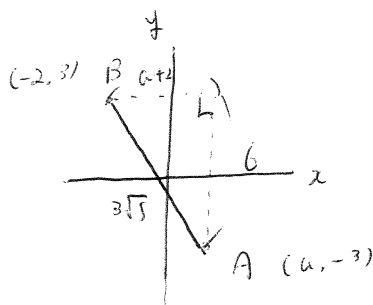
$$\sqrt{(3\sqrt{5})^2 - 6^2} = a + 2$$

$$\sqrt{45 - 36} = a + 2$$

$$\sqrt{9} = a + 2$$

$$3 = a + 2$$

$$\underline{a = 1} \text{ ㉖}$$



(エ) $x^2 - 3 = 2x + 3 + 18$

$$x^2 - 2x - 24 = 0$$

$$(x-6)(x+4) = 0$$

$$x = -4, 6$$

$$\underline{x = 6} \text{ ㉗}$$

(オ) 中点連結定理より

$$DE \parallel AB$$

$$\triangle DGC \sim \triangle AFC$$

相似 1 : 2

面積 1 : 4

$$\triangle DGC = \frac{1}{4} \triangle AFC$$

$$= \frac{1}{4} \times \frac{2}{5} \triangle ABC$$

$$= \frac{1}{10} \triangle ABC$$

$$\underline{\frac{1}{10} \text{ 倍}} \text{ ㉘}$$

