

$$\textcircled{1} \quad 3i^{13} \cdot i\sqrt{5} \cdot 2 \cdot \sqrt{9} \cdot \sqrt{4} \cdot \sqrt{5} - (3 + 2i^{26})$$

$$3(i^2) \cdot i\sqrt{5} \cdot 2 \cdot 3 \cdot 2 \cdot \sqrt{5} - (3 + 2(-1))$$

$$36(i^2) \cdot 5 - (1)$$

$$-180 - 1 = \boxed{-181}$$

$$\textcircled{2} \quad \frac{(3+6i)-(2+i)}{(3+i)(2+3i)(1-5i)} = \frac{3+6i-2-i}{(6+11i-3)(1-5i)} = \frac{1+5i}{(3+11i)(1-5i)}$$

$$= \frac{1+5i}{3-15i+11i-55i^2} = \frac{1+5i}{58-4i} \cdot \frac{58+4i}{58+4i}$$

$$= \frac{58 + 290i + 4i + 20i^2}{3364 + 16}$$

$$= \boxed{\frac{38 + 294i}{3380}}$$

$$\textcircled{3} \quad \frac{-5i^5 (3i^{28} - 2i^{15}) + 3i^{36} (5i^8)}{4i (2 - 5i)}$$

$$= \frac{-5i (3 - 2(i^3)) + 3(5)}{8i - 20i^2}$$

$$= \frac{-5i (3 + 2i) + 15}{8i + 20}$$

$$= \frac{-15i + 10 + 15}{8i + 20} \cdot \frac{20 - 8i}{20 - 8i}$$

$$= \frac{-300i + 500 + 120i^2 - 100i}{400 - 64i^2}$$

$$= \frac{-500i + 380}{464}$$