Question 1:

Given

$$\frac{x}{5} - (1 + x) = \frac{2}{3}$$

Multiply by 15

$$3x - 15 - 15x = 10$$

Collect like terms

$$-12x = 25$$

Divide by -12

$$x = \frac{-25}{12}$$

Question 2:

$$\left(x^2 - 1\right)(x + 4)$$

Expand the brackets

$$x^3 + 4x^2 - x - 4$$ ✓

Question 3:

Given $x = 3$ and $y = -13$

$$-2x - y + \sqrt{y^2 + 5x} =$$

Substitute $x = 3$ and $y = -13$

$$= -2\,(3) - (-13) + \sqrt{(-13)^2 + 5\,(3)}$$

Simplify

$$= -6 + 13 + \sqrt{169 + 15}$$

$$= 7 + \sqrt{184}$$

$$= 7 + \sqrt{4} \times \sqrt{46}$$

$$= 7 + 2\sqrt{46}$$

Q1:
100/100

TMA:
100/100

Please let me know if you can see the following maths text:

$\int 4x^3 - 5x + \beta \, dx$