

## Work on these with your partner(s) at the board

Evaluate the following

$$1. \int \frac{1}{1+4x^2} dx$$

$$2. \int \frac{x}{1+4x^2} dx$$

$$3. \int \frac{4x^2}{1+4x^2} dx$$

$$4. \int \cos(5x) \sin(5x) \sin(\sin(5x)) dx$$

$$5. \int_{-5}^5 \arctan(x)x^4 dx$$

$$6. \int e^x \cos(x) dx$$

Hint: Try parts twice and be careful with your signs

$$7. \int_0^{\pi} \sin(x^2) dx$$