

February 7

If you were a Winter Olympian,
what sport would you participate in?
Why?

Period	Start	End	Duration
1	7:30	8:15	:45
2	8:20	9:05	:45
3	9:10	9:55	:45
4	10:00	10:50	:50
5 (lunch)	10:50	11:35	:45
6	11:35	12:20	:45
7	12:25	1:10	:45
8	1:15	2:00	:45
Pep Rally	2:00	2:49	:49



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Students will verbally explain how to
evaluate definite integrals by
substitution
(using the words:
inside, outside, product, differential, terms...)



$$\int_0^1 \frac{x}{(x^2 + 1)^3} dx = \int_1^2 \frac{1}{2(u)^3} du$$

$$\int_0^3 x\sqrt{9-x^2} dx = \int_0^9 \frac{1}{2}\sqrt{u} du$$

$$du = 2x dx$$

$$dx = \frac{du}{2x}$$

$$\int_0^1 2x(x^2 + 1)^2 dx = \int_1^2 (u)^2 du$$

$$\int_9^0 -\frac{1}{2}\sqrt{u} du$$

$$\int_0^2 x(x^2 + 1)^2 dx = \int_1^5 \frac{1}{2}(u)^2 du$$

$$\int_2^3 \frac{x}{(x^2 - 3)^2} dx = \int_1^6 \frac{1}{2(u)^2} du$$

$$2(u)^2 du \quad (u)^2 du \quad \frac{1}{2}(u)^2 du \quad \sqrt{u} du \quad \frac{1}{2}\sqrt{u} du$$

$$= \frac{1}{2} \int_1^b \frac{1}{u^2} du$$

$$\int_0^1 \frac{1}{2(u)^2} du \quad \int_0^2 \frac{1}{2(u)^3} du \quad \int_0^3 \frac{2}{(u)^3} du \quad \int_0^9 \frac{2}{(u)^2} du$$

$$\int_0^1 \frac{x}{(x^2 + 1)^3} dx =$$

$$\int_0^3 x\sqrt{9-x^2} dx =$$

$$\int_0^1 2x(x^2 + 1)^2 dx =$$

$$\int_0^2 x(x^2 + 1)^2 dx =$$

$$\int_2^3 \frac{x}{(x^2 - 3)^2} dx =$$