

. Frequency

test
much
better



$$CW: \frac{H-L}{\#} = \frac{24-2}{5} = \frac{22}{5} = 4.4 = 5$$

	f	RF	CF
2-6	4	4/24	4
7-11 	8	8/24	12
12-16 	7	7/24	19
17-21	4	4/24	23
22-26	1	1/24	24

$$CW: \frac{H-L}{\#} = \frac{528-30}{5} = \frac{498}{5} = 99.6 = 100$$

30 - 129 ||
130 - 229 |||
230 - 329 |
330 - 429 |
430 - 529 |

$$63. \int x \sec^2 x dx$$

+	—	x	Sec ² x
-	-	1	tan x
+		0	-ln cos x

$$x \tan x + |\ln|\cos x|| + C$$

8.2C

wCID? I can use trig identities
to integrate

A. Trig: Some arent cyclical - just a
pain

1. Use identities

a. $\sin^2 x + \cos^2 x = 1$

b. $\sin^2 x = \frac{1 - \cos 2x}{2}$

c. $\cos^2 x = \frac{1 + \cos 2x}{2}$

$$\text{Ex. } \int \sin^3 x \cos x dx$$

$$u = \sin x$$

$$du = \underline{\cos x dx}$$

$$\int u^3 du$$

$$\frac{u^4}{4} + C$$

$$\frac{\sin^4 x}{4} + C$$

$$\text{Ex. } \int \sin^3 x \cos^4 x dx$$

$$\int \sin x \sin^2 x \cos^4 x dx$$

$$\int \sin x (1 - \cos^2 x) \cos^4 x dx$$

$$\int \sin x (\cos^4 x - \cos^6 x) dx$$

$$\int (\sin x \cos^4 x - \sin x \cos^6 x) dx$$

$$u = \cos x \quad -\int u^4 du$$

$$du = -\sin$$

$$\frac{-u^5}{5}$$

$$\frac{-\cos^5 x}{5} + \frac{\cos^7 x}{7} + C$$

$$\text{Ex } \int \frac{\cos^3 x \, dx}{\sin x}$$

$$\int \frac{\cos x \cos^2 x \, dx}{\sin x}$$

$$\int \frac{\cos x (1 - \sin^2 x)}{\sin x} = \int \frac{\cos x - \cos x \sin^2 x}{\sin x}$$

$$\begin{aligned} u &= \cos \\ du &= -\sin x \, dx = \int \cot x - \frac{\cos x \sin^2 x}{\sin x} \, dx \\ &= \ln |\sin x| + \frac{\cos^2 x}{2} + C \end{aligned}$$

$$\int \cot 5x \, dx$$

$$\frac{1}{5} \ln |\sin 5x| + C$$

$$\cos^2 x = \frac{1 + \cos 2x}{2}$$

$$\int \cos^2 7x \, dx = \int \frac{1 + \cos 14x}{2} \, dx$$

$$= \int \frac{1}{2} + \frac{\cos 14x}{2} \, dx \quad \begin{array}{l} u = 14x \\ du = 14 \end{array}$$

$$\frac{1}{2}x + \frac{1}{28} \sin 14x + C$$

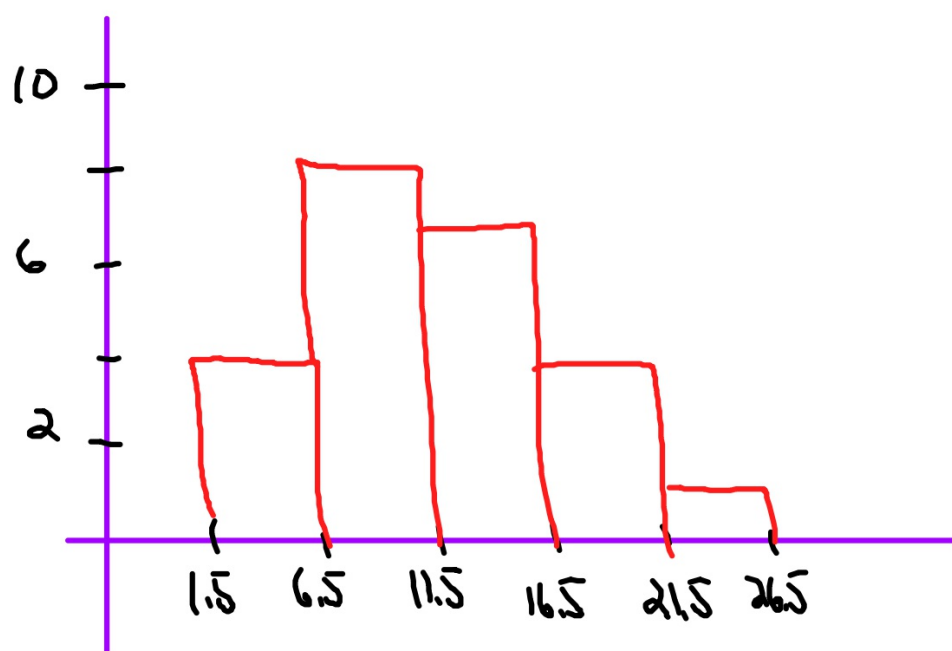
P.5410

5-9

13,14

Histogram - a bar graph
that charts frequencies

1. Vertical Scale - f
 - pretty numbers
2. Horizontal Scale - class widths
 - adjust by 0.5
3. Make bars that touch



Histogram - a bar graph
that charts frequencies

1. Bars touch
2. Vertical Scale - frequencies
3. Horizontal Scale - classes
(kind of) → Adjust by 0.5

