

Let's do the numbers...

Are lines CB and FA Parallel?

Page 67

Find the slope of line FA with coordinates:

$$F = (\frac{1}{2}, -1)$$

$$A = (+4 \frac{1}{2}, +5)$$

$$\frac{y_2 - y_1}{x_2 - x_1} = \text{slope}$$

Figure out the distances of the "rise" and "run"

$$\frac{5 - (-1)}{4 \frac{1}{2} - \frac{1}{2}} = \frac{5 + 1}{4} = \frac{6}{4} = \frac{3}{2}$$

$$\text{slope FA} = \frac{3}{2}$$

Find the slope of the line CB with coordinates:

$$C = (-4, -1)$$

$$B = (+1 \frac{1}{2}, +7)$$

$$\frac{y_2 - y_1}{x_2 - x_1} = \text{slope}$$

Figure out the distances of the "rise" and "run"

$$\frac{7 - (-1)}{1 \frac{1}{2} - (-4)} = \frac{7 + 1}{1 \frac{1}{2} + 4} = \frac{8}{5 \frac{1}{2}} = \frac{8}{\frac{11}{2}} = 8/1 \times 2/11 = 16/11$$

$$\text{slope CB} = 16/11$$

$$16/11 \neq 3/2$$

The Lines CB and FA are not parallel!

Trigonometric Table for Angles 35, 36, 37, 38...

Angle °	Sine	Cosine	Tangent	Cotangent	Secant	Cosecant
35	.5736	.8192	.7002	1.428	1.221	1.743
36	.5878	.8090	.7265	1.376	1.236	1.701
37	.6018	.7986	.7536	1.327	1.252	1.662
38	.6157	.7880	.7813	1.280	1.269	1.624

Page 71