Trig Review Ch. 7

Quiz 7.7 Wed.
Test Ch. 7 Mon.

For Thurs. SGR

$12x + 5y - 3 = 0$

$5y = -12x + 3$

$y = \frac{-12}{5}x + \frac{3}{5}$

$\frac{-6}{2.5}$

$y = \frac{5}{12}x + B$

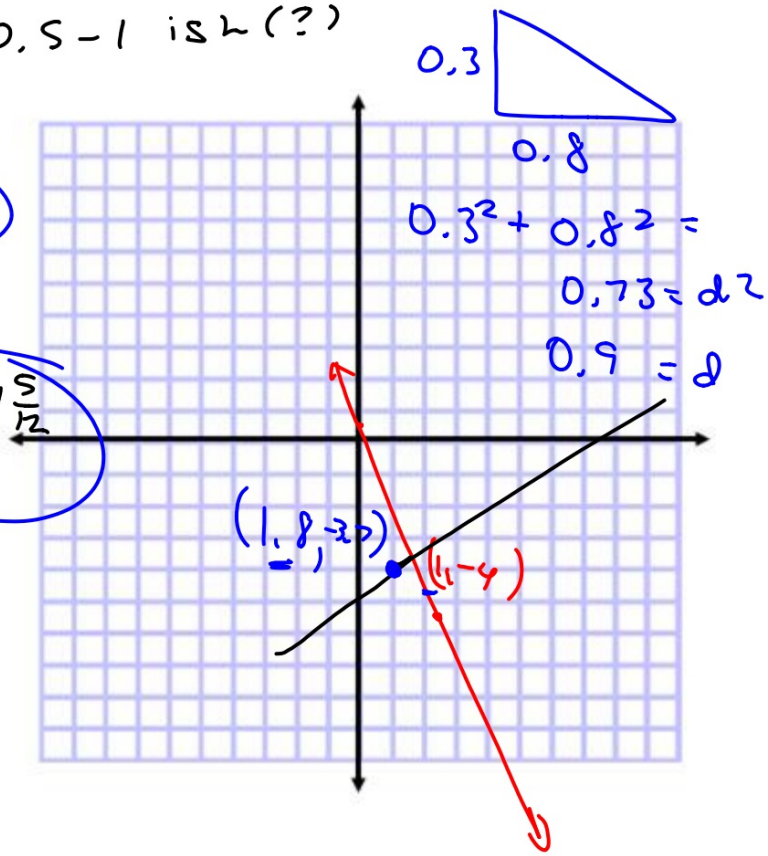
$-4 = \frac{5}{12} \cdot 1 + B$

$-4 = \frac{5}{12} + B$

$-4\frac{5}{12} = B$

$y = \frac{5}{12}x - 4\frac{5}{12}$

0,5 - 1 is 2 (?)



$4x - y + 1 = 0 \rightarrow$ ~~$y = 4x + 1$~~ $(0, 1)$

$4x - y - 8 = 0$ $\quad y = 4x - 8$

$+y \quad +y$

4

3-ish

$y = -\frac{1}{4}x + 1$

$-\frac{1}{4}x + 1 = 4x - 8$

$+\frac{1}{4}x \quad +8$

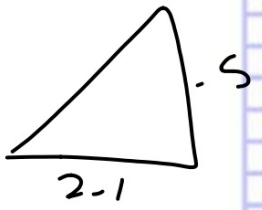
$9 = 4.25x$

$2.1 = x$

$y = -\frac{1}{4}(2.1) + 1$

$= -0.525 + 1$

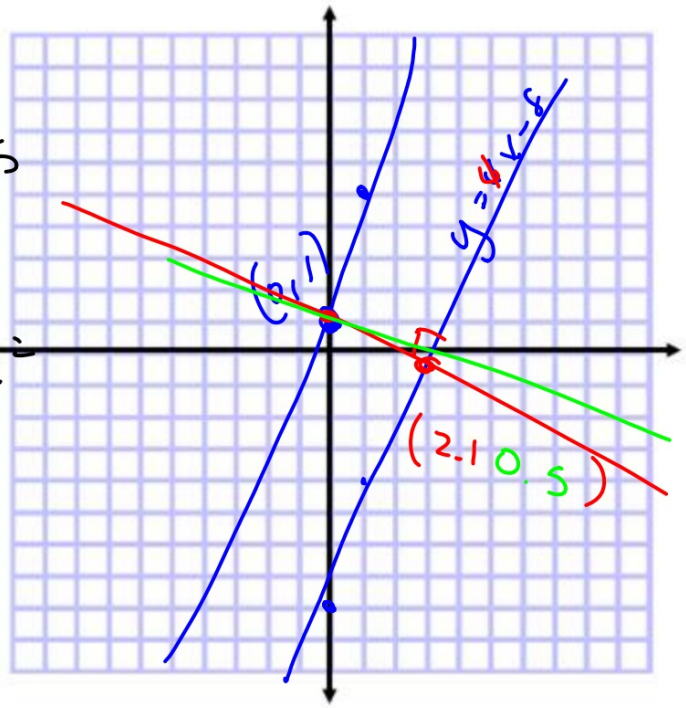
$= 0.48 \approx 0.5$



$2.1^2 + .5^2 = h^2$

$4.66 = h^2$

2.16



$$-2.4x + 0.6 = 0.42x - 4.42$$
$$-0.42x \quad -0.6 \quad -0.42y \quad -0.6$$

$$\frac{-2.82x}{-2.82} = \frac{-5.02}{-2.82}$$

$$x = 1.8$$

$$y = 0.42(1.8) - 4.42$$
$$= 0.756 - 4.42$$
$$= -3.7$$

Solve each equation for $0° \leq x < 360°$.

34. $\tan x + 1 = \sec x$

Solve each equation for all real values of x.

37. $\sin x \tan x - \frac{\sqrt{2}}{2} \tan x = 0$

Find the distance between the point with the given coordinates and the line with the given equation.

48. $(5, 6), 2x - 3y + 2 = 0$

Find the distance between the parallel lines with the given equations.

52. $y = \frac{x}{3} - 6$

$y = \frac{x}{3} + 2$

Use the given information to determine the trigonometric value. In each case, $0° < \theta < 90°$.

11. If $\sin\theta = \frac{1}{2}$, find $\csc\theta$.

12. If $\tan\theta = 4$, find $\sec\theta$.

13. If $\csc\theta = \frac{5}{3}$, find $\cos\theta$.

Verify that each equation is an identity.

16. $\cos^2 x + \tan^2 x \cos^2 x = 1$

17. $\dfrac{1 - \cos\theta}{1 + \cos\theta} = (\csc\theta - \cot\theta)^2$

Use sum or difference identities to find the exact value of each trigonometric function.

20. $\cos 195°$ **21.** $\cos 15°$

Find each exact value if $0 < x < \frac{\pi}{2}$ and $0 < y < \frac{\pi}{2}$.

24. $\cos(x - y)$ if $\sin x = \frac{7}{25}$ and $\cos y = \frac{2}{3}$

REVIEW EXERCISES

Use a half-angle identity to find the exact value of each function.

26. $\cos 75^\circ$ **27.** $\sin \frac{7\pi}{8}$

If θ is an angle in the first quadrant and $\cos\theta = \frac{3}{5}$, find the exact value of each function.

30. $\sin 2\theta$

31. $\cos 2\theta$