Math 1513 - College Algebra

Discussion Board Week 5 - Due 2012.02.11

For each of the following pairs of points, perform the following:

(a) Find the slope of the line passing through the two points.
(b) Find the point-slope form of the line passing through the two points.
(c) Find the y-intercept of the line passing through the two points.
(d) Find the slope-intercept form of the line passing through the two points.

Do NOT use decimals at any point in this week's problem.

1. $\left(2\pi+\sqrt{5}, \frac{\sqrt{2}}{3+\sqrt{3}}\right), \left(\sqrt{3}\pi-\frac{2}{3}, 8+\sqrt{5}\right)$
2. $\left(\frac{3\pi}{7}, \frac{2}{\sqrt{3}}-\pi\right), \left(-\sqrt{2}\pi-\sqrt{5}, \frac{1}{3-\sqrt{3}}\right)$
3. $\left(\frac{\pi}{3}, \frac{\pi-1}{\pi+1}\right), \left(\frac{2}{\sqrt{3}}, \pi+\frac{1}{3}\right)$
4. $\left(2+\sqrt{7}, -3-\sqrt{6}\right), \left(\sqrt{3}\pi+2, \frac{2-\pi}{5}\right)$
5. $\left(7\pi^2-\sqrt{2}, \sqrt{5}\pi+\sqrt{7}\right), \left(-\sqrt{\pi}, \frac{1}{\pi}\right)$
6. $\left(\frac{\pi-\sqrt{2}}{\sqrt{2}}, -6+\sqrt{3}\right), \left(5+\sqrt{7}, -3\sqrt{4}+\pi\right)$
7. $\left(2-\sqrt{7}\pi, \frac{-2+\pi}{1-\pi}\right), \left(\frac{1}{3+\pi^2}, \frac{-3+\pi}{2+\sqrt{2}}\right)$
8. $\left(-5\pi+\sqrt{2}, \sqrt{\pi+1}\right), \left(-\frac{2+\pi}{5}, -\sqrt{13}\right)$
9. $\left(6+\sqrt{2}\pi, -\frac{2}{\sqrt{5}}\right), \left(6-2\pi, 4+\sqrt{5}\right)$
10. $\left(2+\sqrt{7}, \frac{2}{-3+\pi}\right), \left(\frac{4+\sqrt{3}}{7}, -2\sqrt{3}+\frac{1}{\pi}\right)$
11. $\left(-2-\sqrt{5}, -\frac{5}{7}\right), \left(\frac{2}{\sqrt{15}}-3, -3+5\pi\right)$
12. $\left(\frac{2}{5}, -\frac{\pi}{3+\sqrt{22}}\right), \left(-4+\sqrt{7}, \frac{2+\sqrt{3}}{2-\sqrt{3}}\right)$
13. $\left(\frac{3}{\pi-5}, -\frac{\pi+4}{\sqrt{2}-3}\right), \left(-5+\sqrt{5}\pi, \frac{2}{7}\right)$
14. $\left(-\frac{2+\sqrt{3}}{7}, -4\pi+\sqrt{3}\right), \left(\sqrt{2\pi}, \frac{2+\pi}{2+\pi}\right)$
15. $\left(\frac{5+\pi}{2}, -5-\sqrt{2}\right), \left(\frac{1}{1+2\pi}, \sqrt{5}+2\right)$
16. $\left(\pi+\pi^2, \frac{-2+\pi}{\sqrt{3}-1}\right), \left(-\frac{2}{\pi^2}, 2\sqrt{5}+1\right)$
17. $\left(\sqrt{43}+1, \frac{2+\pi}{3}\right), \left(-\frac{3}{2+\pi}, \sqrt{47}\pi+\pi^2\right)$
18. $\left(\sqrt{3}-\sqrt{5}, \frac{2}{1+\sqrt{2}}\right), \left(\pi-\sqrt{2}, -\frac{3}{5\sqrt{2}}\right)$
19. $\left(-\frac{1}{2\pi+3}, \sqrt{\pi+1}-\frac{2}{3}\right), \left(3+\pi^2, \frac{\sqrt{pi}}{2-\sqrt{2}}\right)$
20. $\left(6+\sqrt{3}, -\frac{2\pi}{3+\sqrt{2}}\right), \left(\frac{3+\pi}{3-\pi}, \frac{3+\sqrt{2}}{2\pi}\right)$
21. $\left(\frac{3\pi}{3\pi+1}, -\sqrt{2+\pi}+4\sqrt{3}\right), \left(-\frac{2}{\pi+1}, \frac{3\pi-1}{3\pi+1}\right)$
22. $\left(\frac{2-\sqrt{3}}{2+\sqrt{3}}, 4-\frac{2}{\pi}\right), \left(-3+\sqrt{2\pi}, -4+\frac{\pi}{2}\right)$
23. $\left(-3+\sqrt{6\pi}, \frac{2\pi}{2\pi+1}\right), \left(\sqrt{12}-\pi, \frac{2+\sqrt{\pi}}{\sqrt{3}-4}\right)$
24. $\left(2+\pi-\sqrt{3}, \frac{2+\pi^2}{2-\pi}\right), \left(5+4\sqrt{3}, 7\pi^2+\frac{2}{\sqrt{5}}\right)$
25. $\left(4+\sqrt{5}\pi, 34+\frac{\pi^3}{3}\right), \left(-\frac{\sqrt{5}+6\pi}{34+\pi^2}, \frac{2\pi-\sqrt{5}}{\sqrt{\pi}+2}\right)$