Math 141 Quiz 2 Preparation Ch.2.1 to 2.2 v02
NO BOOK/ NO NOTES/YES CALCUATOR
Dressler Winter 2016

Name_____

Find the slope of the line passing through the pair of points or state that the slope is undefined.

1) (1, 6) and (4, 8) 1) _____

2) (7, 1) and (5, 8) 2) _____

3) (–5, 9) and (–6, 2) 3) _____

4) (2, –6) and (–9, –9) 4) _____

5) (–3, 3) and (–3, –1) 5) _____

6) (7, 3) and (7, –6) 6) _____

7) (–4, –2) and (–9, –2) 7) _____

8) (–5, 9) and (–8, 9) 8) _____

Find the distance between the pair of points. Give an exact answer.

9) (–4, –1) and (–10, –9) 9) _____

10) (–2, –3) and (–7, 9) 10) _____

11) (–3, –1) and (5, 1) 11) _____

12) (–2, –6) and (6, –4) 12) _____

13) (3, 2) and (–6, –1) 13) _____

14) (–1, –4) and (–3, 6) 14) _____

15) (0, 0) and (8, 2) 15) _____

16) (0, 0) and (8, 4) 16) _____

17) (0, –8) and (–2, –8) 17) _____

18) (0, –6) and (–9, –6) 18) _____

19) $(-3\sqrt{5}, -1)$ and $(-2\sqrt{5}, 1)$ 19) _____

20) $(-4\sqrt{15}, -3)$ and $(-2\sqrt{15}, -1)$ 20) _____

Find the midpoint of the line segment with the given end points.

21) (–5, –9) and (–6, –8) 21) _____

22) (–4, –3) and (8, –2) 22) _____

23) (7, 8) and (2, 4) 23) _____

24) (1, 2) and (4, 5) 24) _____

25) (1, –6) and (–4, 0) 25) _____

26) (9, –9) and (–9, 4) 26) _____

27) (–4, –4) and (7, 5) 27) _____

28) $\left(4, -\frac{2}{3}\right)$ and $\left(-\frac{3}{2}, -\frac{5}{3}\right)$ 28) _____

29) $\left(\frac{3}{5}, -\frac{3}{4}\right)$ and $\left(\frac{4}{5}, \frac{3}{2}\right)$ 29) _____

30) $\left(\frac{4}{5}, -2\right)$ and $\left(-\frac{6}{5}, -\frac{5}{4}\right)$ 30) _____

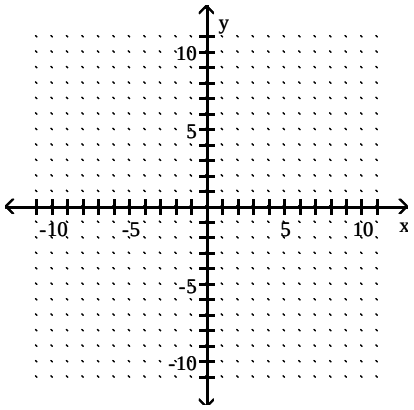
31) $(3\sqrt{5}, -8\sqrt{6})$ and $(6\sqrt{5}, -5\sqrt{6})$ 31) _____

32) $(-8\sqrt{3}, 2\sqrt{7})$ and $(-5\sqrt{3}, 7\sqrt{7})$ 32) _____

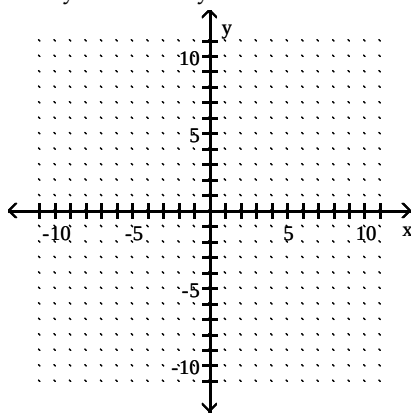
33) $(4\sqrt{3}, -7\sqrt{6})$ and $(7\sqrt{3}, -4\sqrt{6})$ 33) _____

Complete the square and write the equation in standard form. Then give the center and radius of the circle and graph the equation.

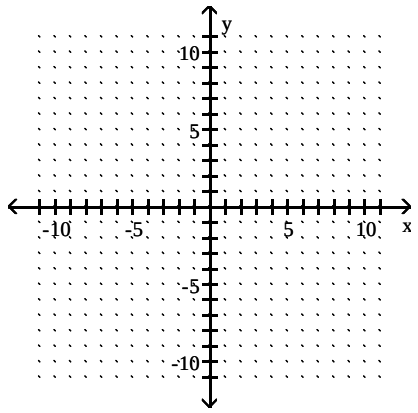
34) $x^2 + y^2 - 12x - 2y + 33 = 0$ 34) _____



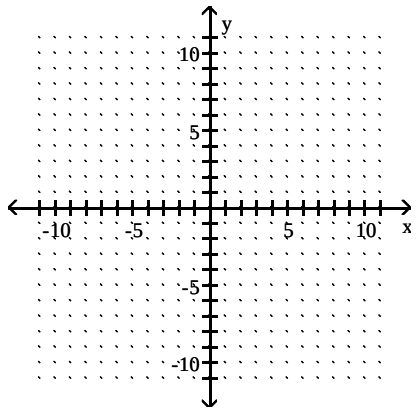
35) $x^2 + y^2 - 8x - 12y + 48 = 0$ 35) _____



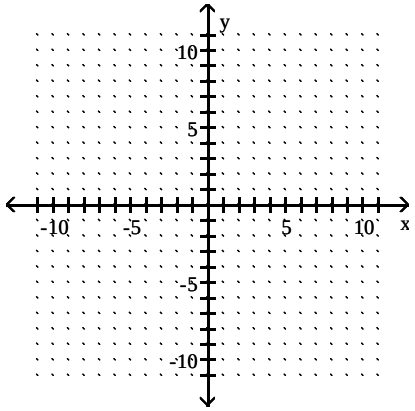
36) $x^2 + y^2 + 8x + 6y + 16 = 0$ 36) _____



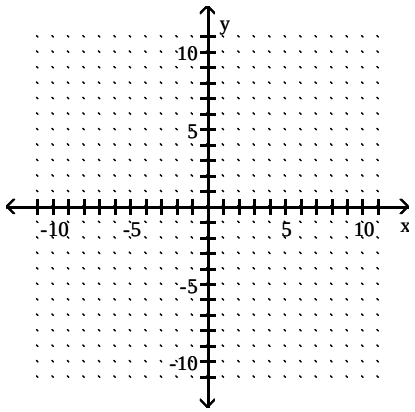
37) $x^2 + y^2 + 10x + 12y + 57 = 0$ 37) _____



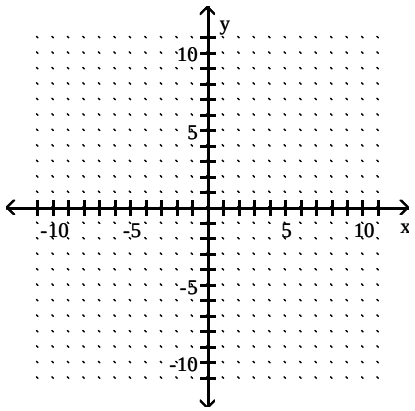
38) $x^2 + y^2 - 8x + 12y + 48 = 0$ 38) _____



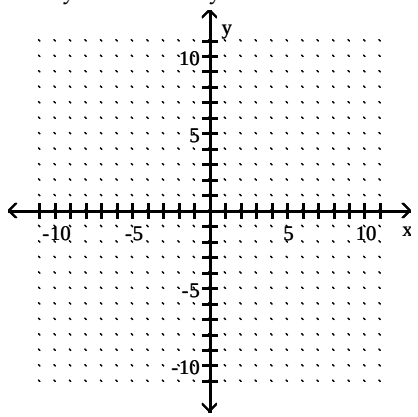
39) $x^2 + y^2 - 12x + 6y + 29 = 0$ 39) _____



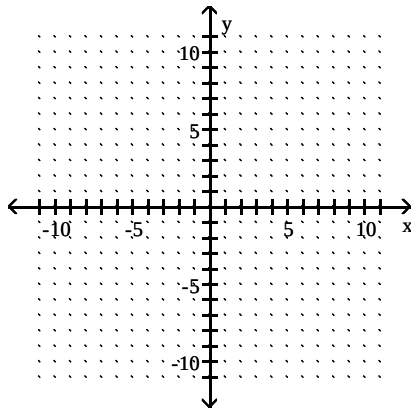
40) $x^2 + y^2 + 4x - 8y + 16 = 0$ 40) _____



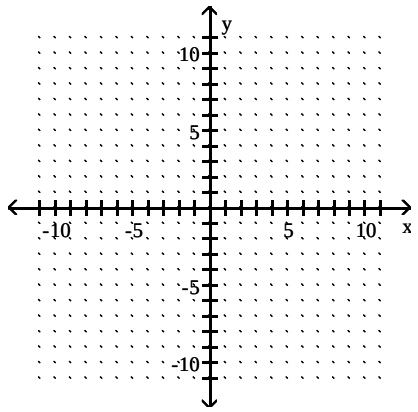
41) $x^2 + y^2 + 10x - 12y + 57 = 0$ 41) _____



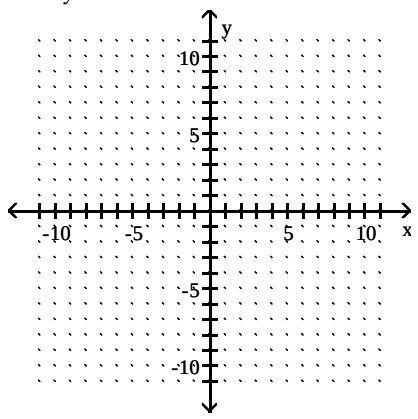
42) $x^2 + y^2 + 6y + 5 = 0$ 42) _____



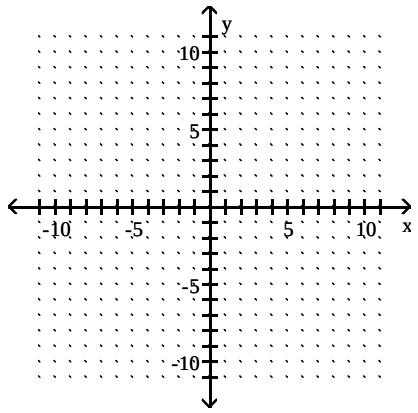
43) $x^2 + y^2 + 14y + 40 = 0$ 43) _____



44) $x^2 + y^2 + 6x - 0 = 0$ 44) _____



45) $x^2 + y^2 + 10x + 24 = 0$ 45) _____

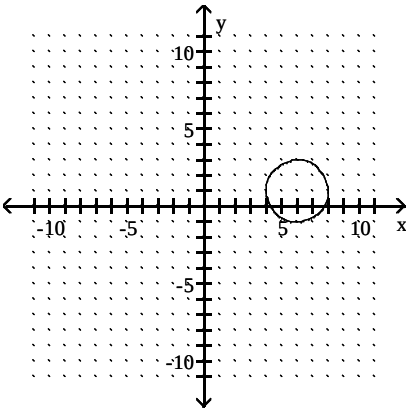


1) $\frac{2}{3}$
2) $-\frac{7}{2}$
3) 7
4) $\frac{3}{11}$
5) undefined
6) undefined
7) 0
8) 0
9) 10 units
10) 13 units
11) $2\sqrt{17}$ units
12) $2\sqrt{17}$ units
13) $3\sqrt{10}$ units
14) $2\sqrt{26}$ units
15) $2\sqrt{17}$ units
16) $4\sqrt{5}$ units
17) 2 units
18) 9 units
19) 3 units
20) 8 units
21) $\left(-\frac{11}{2}, -\frac{17}{2}\right)$
22) $\left(2, -\frac{5}{2}\right)$
23) $\left(\frac{9}{2}, 6\right)$
24) $\left(\frac{5}{2}, \frac{7}{2}\right)$
25) $\left(-\frac{3}{2}, -3\right)$
26) $\left(0, -\frac{5}{2}\right)$
27) $\left(\frac{3}{2}, \frac{1}{2}\right)$
28) $\left(\frac{5}{4}, -\frac{7}{6}\right)$
29) $\left(\frac{7}{10}, \frac{3}{8}\right)$
30) $\left(-\frac{1}{5}, -\frac{13}{8}\right)$
31) $\left(\frac{9\sqrt{5}}{2}, \frac{-13\sqrt{6}}{2}\right)$

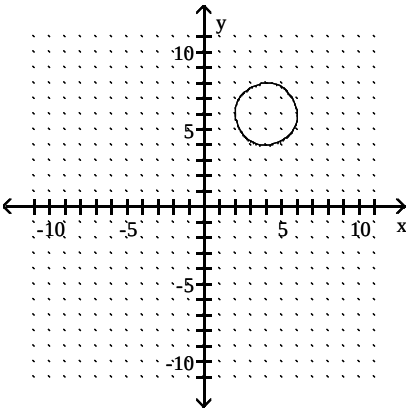
32) $\left(\frac{-13\sqrt{3}}{2}, \frac{9\sqrt{7}}{2}\right)$

33) $\left(\frac{11\sqrt{3}}{2}, \frac{-11\sqrt{6}}{2}\right)$

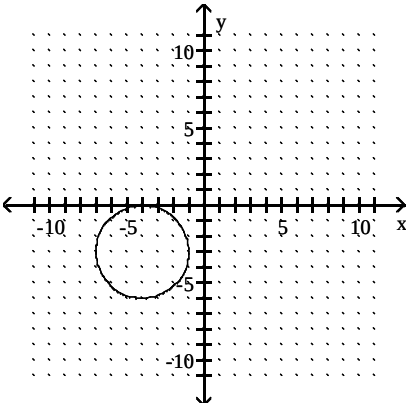
34) $(x - 6)^2 + (y - 1)^2 = 4$
center (6, 1), r = 2



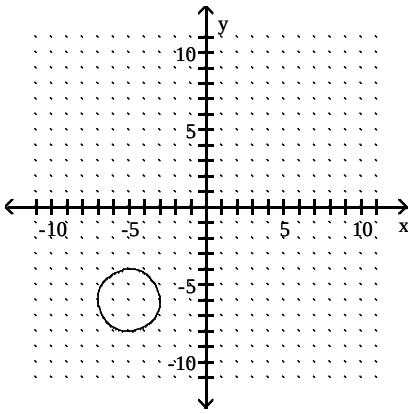
35) $(x - 4)^2 + (y - 6)^2 = 4$
center (4, 6), r = 2



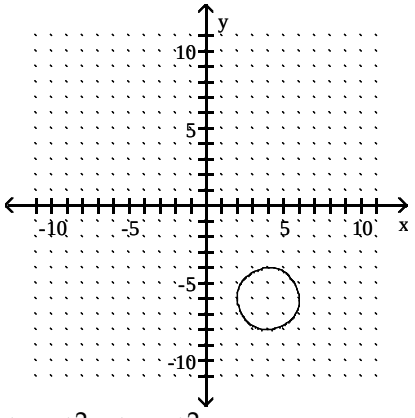
36) $(x + 4)^2 + (y + 3)^2 = 9$
center (−4, −3), r = 3



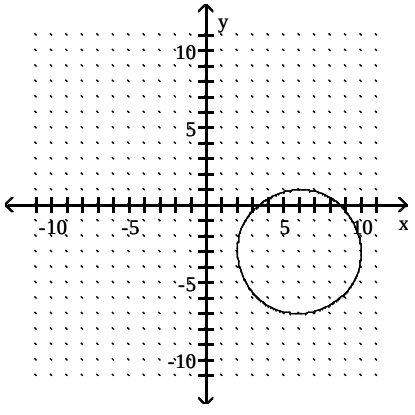
37) $(x + 5)^2 + (y + 6)^2 = 4$
center (–5, –6), r = 2



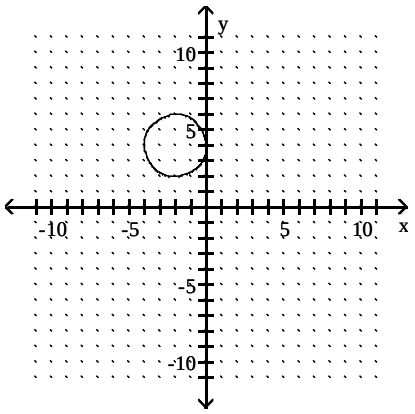
38) $(x - 4)^2 + (y + 6)^2 = 4$
center (4, –6), r = 2



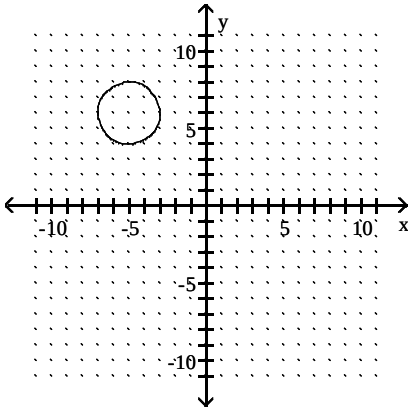
39) $(x - 6)^2 + (y + 3)^2 = 16$
center (6, –3), r = 4



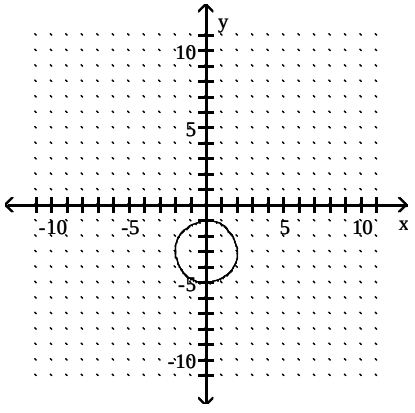
40) $(x + 2)^2 + (y - 4)^2 = 4$
center $(-2, 4)$, $r = 2$



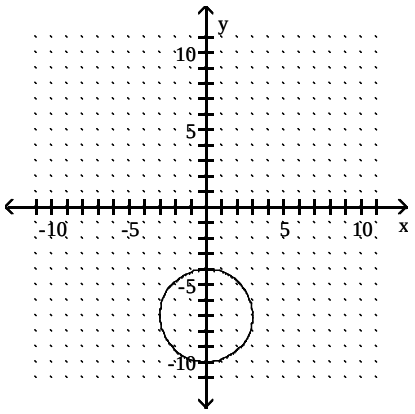
41) $(x + 5)^2 + (y - 6)^2 = 4$
center $(-5, 6)$, $r = 2$



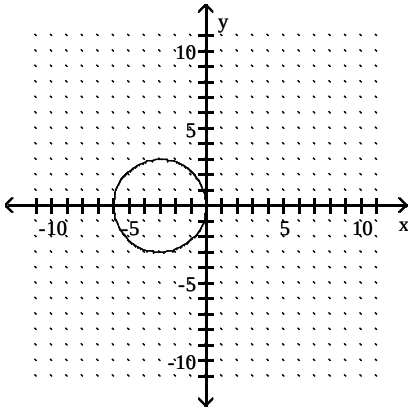
42) $x^2 + (y + 3)^2 = 4$
center $(0, -3)$, $r = 2$



43) $x^2 + (y + 7)^2 = 9$
center $(0, -7)$, $r = 3$



44) $(x + 3)^2 + y^2 = 9$
center $(-3, 0)$, $r = 3$



45) $(x + 5)^2 + y^2 = 1$
center $(-5, 0)$, $r = 1$