Math 141 Quiz 2 Preparation Ch.2.1 to 2.2 v01
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) (2, 8) and (4, 9) 1) _____

2) (1, 6) and (5, 4) 2) _____

3) (–1, –7) and (6, –3) 3) _____

4) (–3, 9) and (–5, –5) 4) _____

5) (–5, –6) and (–5, –9) 5) _____

6) (9, 1) and (9, –9) 6) _____

7) (8, 6) and (–3, 6) 7) _____

8) (9, 1) and (4, 1) 8) _____

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

9) (–1, –1) and (–6, 11) 9) _____

10) (5, –2) and (0, 10) 10) _____

11) (–6, –6) and (5, –4) 11) _____

12) (–1, –2) and (2, 7) 12) _____

13) (2, –5) and (7, 5) 13) _____

14) (2, –5) and (1, 2) 14) _____

15) (0, 0) and (2, –4) 15) _____

16) (0, 0) and (–3, –7) 16) _____

17) (0, –2) and (8, –2) 17) _____

18) (0, –7) and (–4, –7) 18) _____

19) $(2\sqrt{5}, -4)$ and $(4\sqrt{5}, 0)$ 19) _____

20) $(2\sqrt{3}, -5)$ and $(6\sqrt{3}, -4)$ 20) _____

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

21) (–9, –3) and (–5, 8) 21) _____

22) (–6, –6) and (–7, –3) 22) _____

23) (1, 7) and (0, 6) 23) _____

24) (0, 4) and (4, 3) 24) _____

25) (3, –2) and (–1, 4) 25) _____

26) (1, –8) and (–6, 7) 26) _____

27) (–9, –2) and (8, 6) 27) _____

28) $\left(-\frac{9}{4}, \frac{2}{3}\right)$ and $\left(-\frac{1}{2}, 2\right)$ 28) _____

29) $\left(\frac{7}{4}, -\frac{1}{4}\right)$ and $\left(-\frac{3}{4}, -\frac{7}{4}\right)$ 29) _____

30) $\left(\frac{3}{5}, \frac{9}{4}\right)$ and $\left(\frac{1}{5}, -\frac{7}{4}\right)$ 30) _____

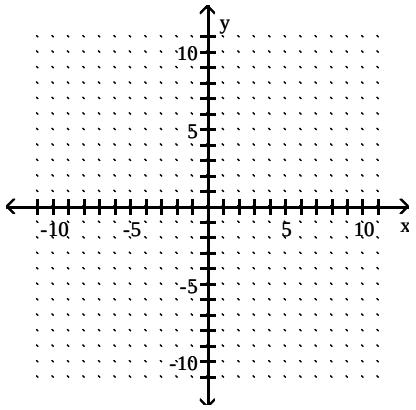
31) $(9\sqrt{6}, 8\sqrt{5})$ and $(14\sqrt{6}, 13\sqrt{5})$ 31) _____

32) $(4\sqrt{7}, 2\sqrt{2})$ and $(7\sqrt{7}, 5\sqrt{2})$ 32) _____

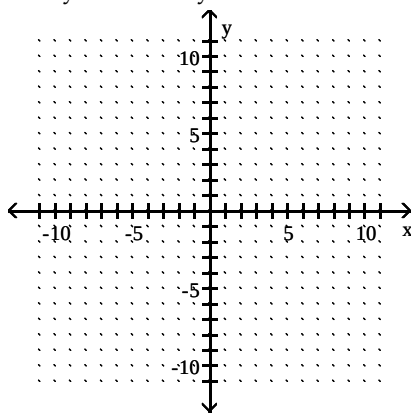
33) $(6\sqrt{7}, 8\sqrt{7})$ and $(9\sqrt{7}, 11\sqrt{7})$ 33) _____

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

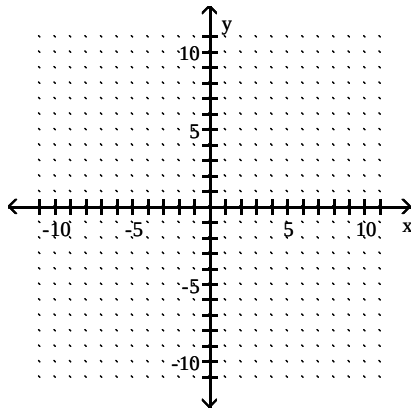
34) $x^2 + y^2 - 8x - 6y + 9 = 0$ 34) _____



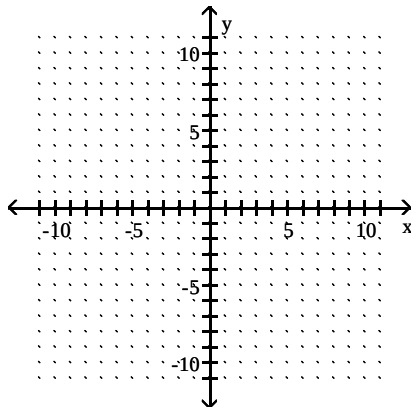
35) $x^2 + y^2 - 12x - 8y + 43 = 0$ 35) _____



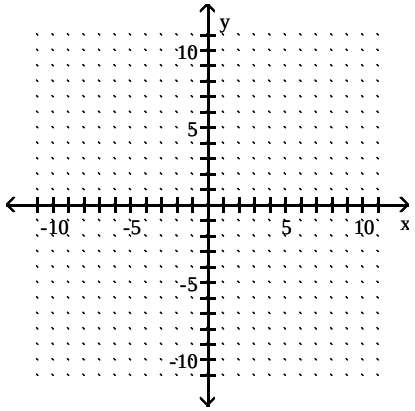
36) $x^2 + y^2 + 6x + 8y + 9 = 0$ 36) _____



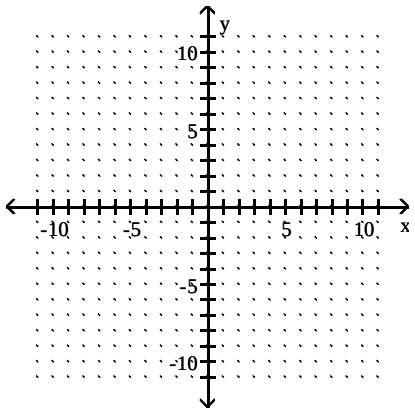
37) $x^2 + y^2 + 4x + 6y + 4 = 0$ 37) _____



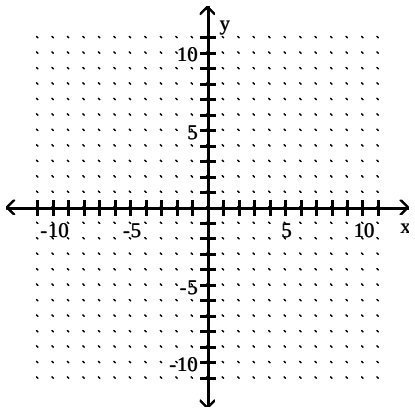
38) $x^2 + y^2 - 2x + 8y - 19 = 0$ 38) _____



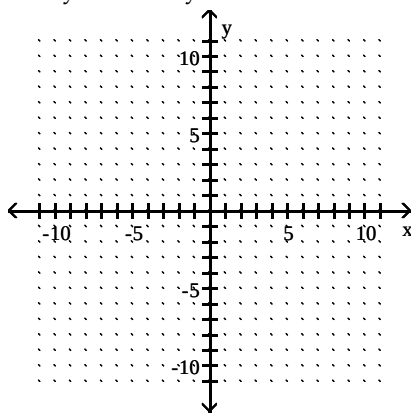
39) $x^2 + y^2 - 4x + 12y + 24 = 0$ 39) _____



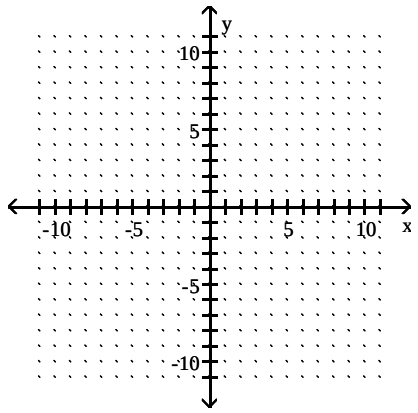
40) $x^2 + y^2 + 8x - 4y - 16 = 0$ 40) _____



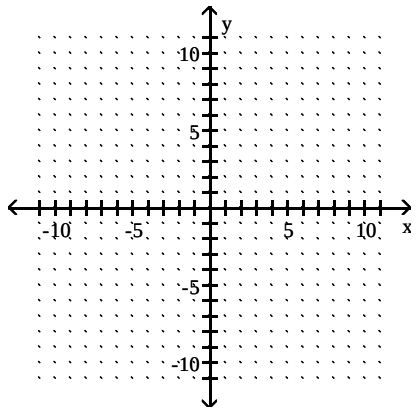
41) $x^2 + y^2 + 2x - 2y - 23 = 0$ 41) _____



42) $x^2 + y^2 + 8y - 9 = 0$ 42) _____

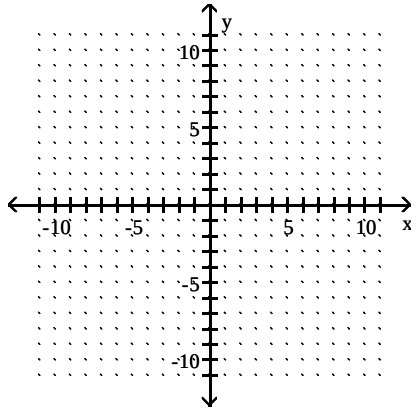


43) $x^2 + y^2 + 14y + 45 = 0$ 43) _____



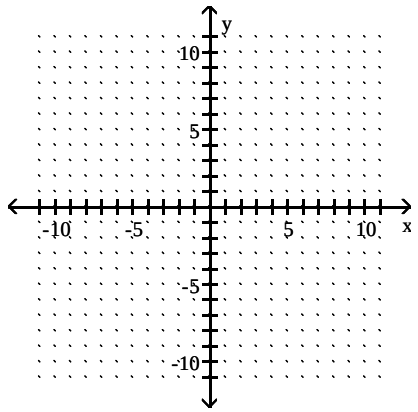
44) $x^2 + y^2 + 2x - 80 = 0$

44) _____



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

45) _____



1) $\frac{1}{2}$

2) $-\frac{1}{2}$

3) $\frac{4}{7}$

4) 7

5) undefined

6) undefined

7) 0

8) 0

9) 13 units

10) 13 units

11) $5\sqrt{5}$ units

12) $3\sqrt{10}$ units

13) $5\sqrt{5}$ units

14) $5\sqrt{2}$ units

15) $2\sqrt{5}$ units

16) $\sqrt{58}$ units

17) 8 units

18) 4 units

19) 6 units

20) 7 units

21) $\left(-7, \frac{5}{2}\right)$

22) $\left(-\frac{13}{2}, -\frac{9}{2}\right)$

23) $\left(\frac{1}{2}, \frac{13}{2}\right)$

24) $\left(2, \frac{7}{2}\right)$

25) $(1, 1)$

26) $\left(-\frac{5}{2}, -\frac{1}{2}\right)$

27) $\left(-\frac{1}{2}, 2\right)$

28) $\left(-\frac{11}{8}, \frac{4}{3}\right)$

29) $\left(\frac{1}{2}, -1\right)$

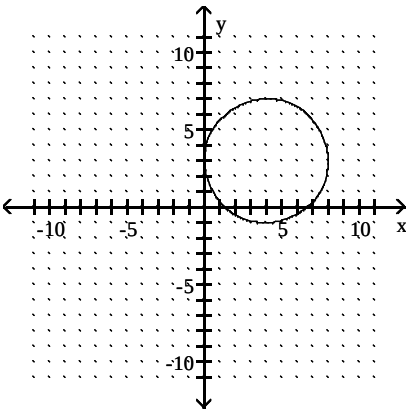
30) $\left(\frac{2}{5}, \frac{1}{4}\right)$

31) $\left(\frac{23\sqrt{6}}{2}, \frac{21\sqrt{5}}{2}\right)$

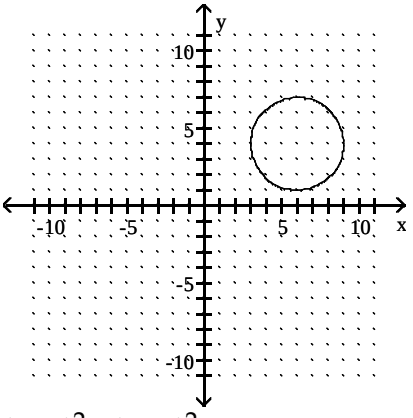
32) $\left(\frac{11\sqrt{7}}{2}, \frac{7\sqrt{2}}{2}\right)$

33) $\left(\frac{15\sqrt{7}}{2}, \frac{19\sqrt{7}}{2}\right)$

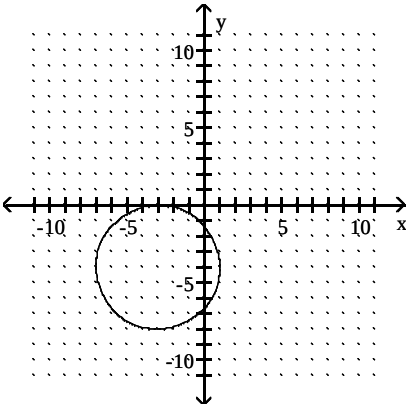
34) $(x-4)^2 + (y-3)^2 = 16$
center (4, 3), r = 4



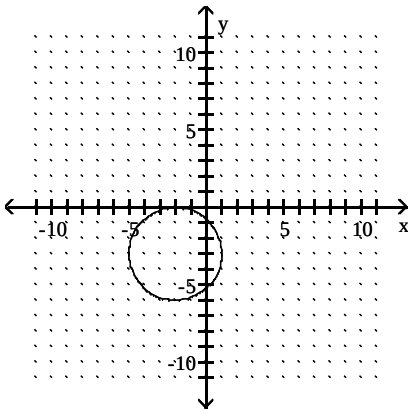
35) $(x-6)^2 + (y-4)^2 = 9$
center (6, 4), r = 3



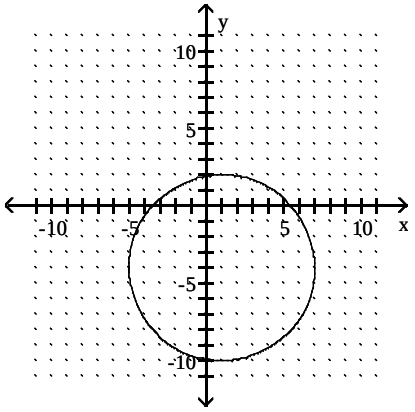
36) $(x+3)^2 + (y+4)^2 = 16$
center (–3, –4), r = 4



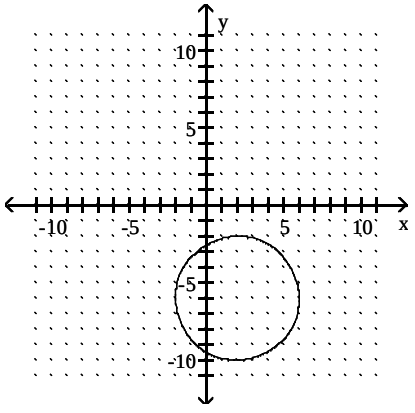
37) $(x + 2)^2 + (y + 3)^2 = 9$
center $(-2, -3)$, $r = 3$



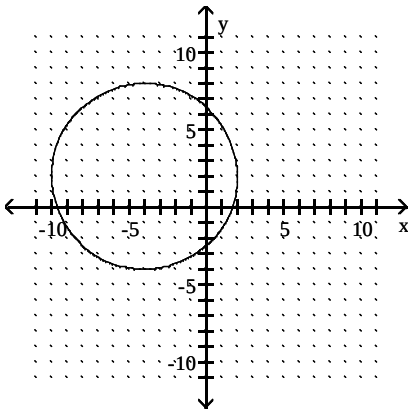
38) $(x - 1)^2 + (y + 4)^2 = 36$
center $(1, -4)$, $r = 6$



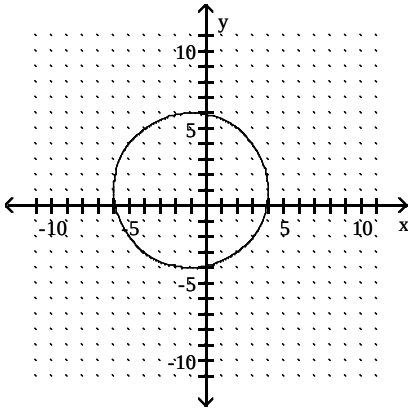
39) $(x - 2)^2 + (y + 6)^2 = 16$
center $(2, -6)$, $r = 4$



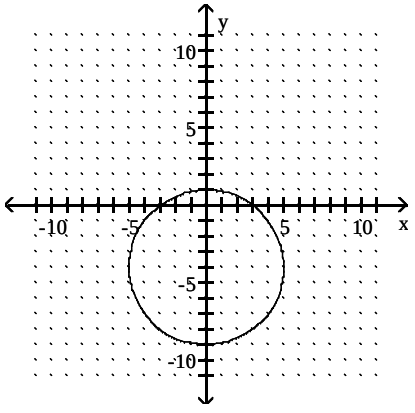
40) $(x + 4)^2 + (y - 2)^2 = 36$
center $(-4, 2)$, $r = 6$



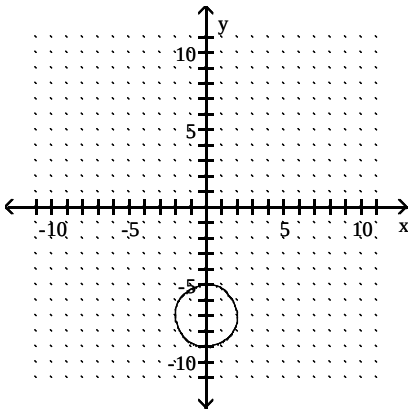
41) $(x + 1)^2 + (y - 1)^2 = 25$
center $(-1, 1)$, $r = 5$



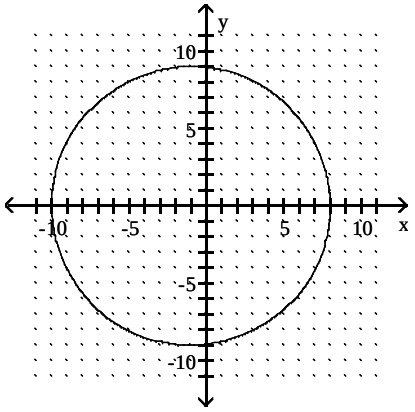
42) $x^2 + (y + 4)^2 = 25$
center $(0, -4)$, $r = 5$



43) $x^2 + (y + 7)^2 = 4$
center $(0, -7)$, $r = 2$



44) $(x + 1)^2 + y^2 = 81$
center $(-1, 0)$, $r = 9$



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