Name_____ Date_____

Unit 1 Study Guide

11.1 - Integers & Absolute Value

Complete the statement using <, >, or =.

1. $|-23|$ _____ 23

2. $-|-78|$ _____ 52

3. You and your friend are swimming against the current. You move forward 15 feet. Your friend is not a strong swimmer, so he moves back 6 feet. Write each amount as an integer.

Order the values from least to greatest.

4. $14, |-25|, -|-34|, 28, |0|$ _____, _____, _____, _____, _____

Simplify the expression.

5. $|-249| =$ _____

6. $-|183| =$ _____

Tell whether the statement is ***always***, ***sometimes***, or ***never*** true. Explain.

7. A negative integer is greater than its opposite. _____

8. An integer is more than its opposite and less than 0._____

9. An integer is less than its opposite._____

6.3- Fractions & Decimals on the Number Line

Complete the statement using <, >, or =.

10. $-\frac{2}{9}$ _____ $-\frac{1}{3}$

11. $-1\frac{2}{3}$ _____ $-1\frac{1}{2}$

12. -6.3 _____ -4.9

13. -0.11 _____ -0.44

Order the integers from least to greatest.

14. $-\frac{5}{8}, -\frac{3}{4}, -1\frac{1}{8}, -\frac{3}{8}, -1\frac{1}{4}$

_____, _____, _____, _____, _____

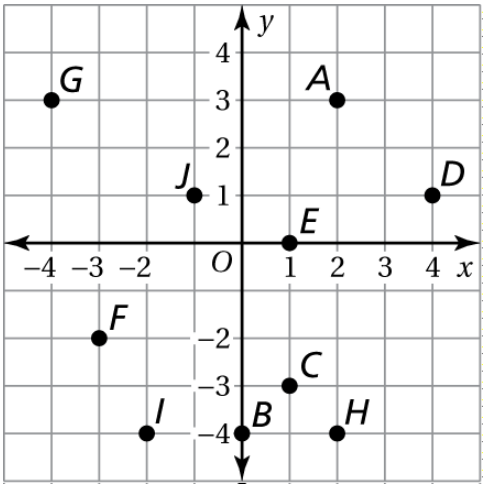
15. $0.7, -0.3, 0, 0.25, -0.37$

_____, _____, _____, _____, _____

6.5 - The Coordinate Plane

Write an ordered pair corresponding to the point. State the quadrant that the point lies in.

		Ordered Pair	Quadrant
16.	Point A	_____	_____
17.	Point C	_____	_____
18.	Point F	_____	_____
19.	Point G	_____	_____



20. What axis is point B on? _____

21. What axis is point E on?_____

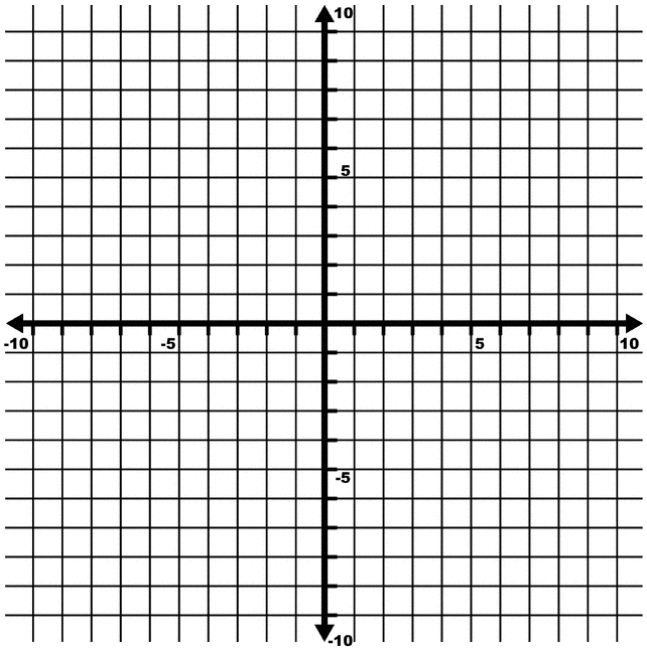
22. What is the coordinate pair for the origin?_____

4.4 - Polygons in the Coordinate Plane

Draw the two polygons on the coordinate plane below with the given vertices.

23. $A(2,5), B(0,0), C(3,2)$

24. $G(4,1), H(9,1), J(9,3), K(4,3)$

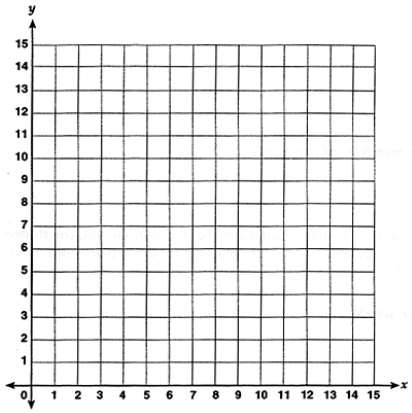


Find the perimeter and area of the polygon with the given vertices.

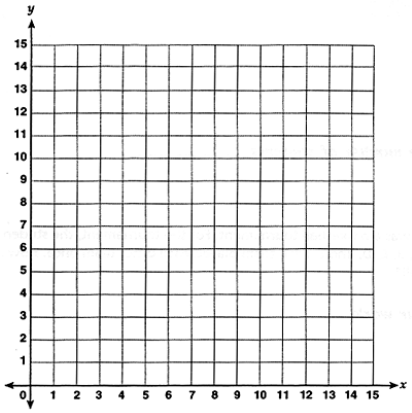
25. $E(0,0), F(7,0), G(7,2), H(0,2)$

Draw a polygon with the given conditions in a coordinate plane.

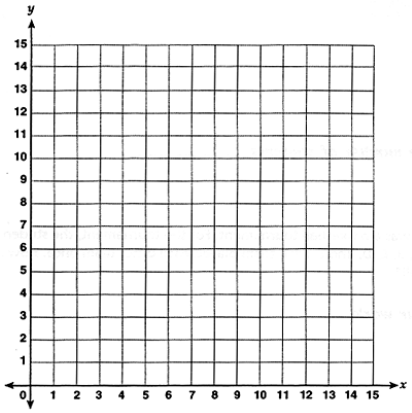
26. a rectangle with a perimeter of 20 units



27. a square with an area of 25 square units



28. a triangle with an area of 6 square units



11.2 & 11.3- Adding & Subtracting Integers

Add.

29. $-9 + (-3)$

30. $6 + (-6)$

31. $9 + (-6)$

32. $7 + (-13)$

33. Your bank account has a balance of $-\$21$. You deposit $\$50$. What is your new balance?

Subtract.

34. $8 - 13$

35. $18 - (-11)$

36. $-14 - 35$

37. $-51 - (-36)$

38. A dolphin is at -28 feet. It swims up and jumps out of the water to a height of 8 feet. Write a subtraction expression for the vertical distance the dolphin travels.

Evaluate the expression.

39. $15 - 42 - (-36)$

40. $17 - (-22) - 22$

41. $-51 - (-23) + (-16)$

42. The table shows the record monthly high and low temperatures in International Falls, Minnesota.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
High (°F)	48	58	76	93	95	99	98	95	95	88	73	57
Low (°F)	−46	46	−38	−14	11	23	34	30	20	2	−32	−41

a. What are the all-time high and all-time low temperatures? _____

b. Which two **consecutive** months are additive inverses of each other? _____

11.4 & 11.5 - Multiplying & Dividing Integers

Multiply.

43. $(-8)(-12)$

44. $10 \bullet (-14)$

45. $-21 \bullet 4$

46. $-15 \bullet (-8)$

47. $5 \bullet (-11) \bullet (-4)$

48. $-15(-3)(-6)$

49. $13 \bullet 2 \bullet (-6)$

Evaluate the expression.

50. $(-12)^2$

51. -12^2

52. $(-7)^3$

53. $-(-2)^3$

Divide.

54. $21 \div (-3)$

55. $-15 \div (-3)$

56. $\dfrac{18}{-6}$

57. $-35 \div 7$

Evaluate the expression.

58. $6 - 12 \div (-3)$

59. $|-16| \div (-2)^2 - 4^2$

60. $\dfrac{-10 + (-2)^3}{-3}$