Name: _____

Date: _____ Grade: _____

SECTION QUIZ 4-1



Remember:
Score an 85% or higher on all three quizzes and you may be exempt from the chapter test!



Congratulations! You have completed this section!
Answer the following questions to test your understanding of the material. When you are finished, hand in your quiz to your teacher. Each answer is worth 2.5 points.

Select or supply the correct answers.

1. _____ (Real, Whole) numbers consists of two main groups of numbers, *irrational* and *rational*.

2. A collection of objects is known as a(n) _____.

3. A collection of objects in which all the members of this collection are contained within another set is called a(n) _____.

4. A ratio can be written in _____ form.

5. _____ (Whole, Integer, Irrational) numbers are members of the set {0, 1, 2, 3, 4, …}.

6. _____ (Whole numbers, Integers, Irrational numbers) are members of the set {…-3, -2, -1, 0, 1, 2, 3, …}.

7. Numbers such as $\sqrt{2}$, $\sqrt{3}$, $\sqrt{7}$ and π are examples of _____ (whole, integer, irrational) numbers.

8. $^{x}/_{0}$ = _____

9. The denominator of a fraction cannot be _____.

10. $2\sqrt{3} \bullet 4\sqrt{5} \bullet 3\sqrt{7}$ = _____

11. $\sqrt{3} \bullet \sqrt{5} \bullet \sqrt{2}$ = _____

12. Whatever operation is performed on one side of the inequality symbol must also be performed on the other side. _____ (a) True or (b) False

Match the sets of numbers with the numbers shown (13-17). Some selections are used more than once; one is not used.

13. _____ -3 (a) Real, Rational

14. _____ 7 (b) Real, Rational, Integers

15. _____ $^{2}/_{5}$ (c) Real, Rational, Integers, Whole numbers

16. _____ $\sqrt{21}$ (d) Real, Irrational, Integers

17. _____ $-^{16}/_{2}$ (e) Real, Irrational

©Copyright 2005, Paradigm Accelerated Curriculum

Rationalize the denominators for questions 18-21.

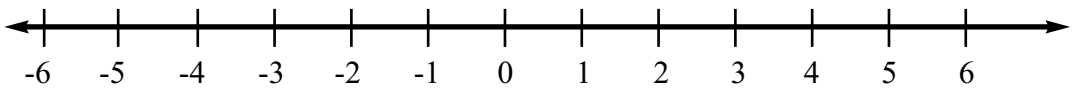
18. $\frac{4}{\sqrt{2}} =$ _____

19. $\frac{18}{\sqrt{3}} =$ _____

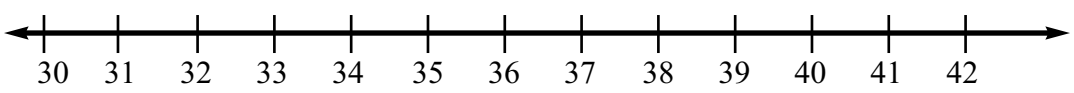
20. $\frac{8(9-6)+15}{13\sqrt{11}} =$ _____

21. $\frac{5(8-3)-15}{\sqrt{5}} =$ _____

22. Graph the solution to $x < -1$ on the number line below.



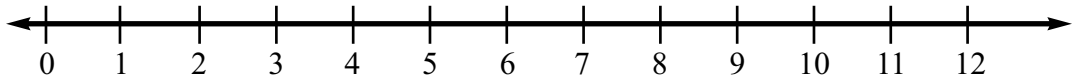
23. Graph the solution to $x > 33$ on the number line below.



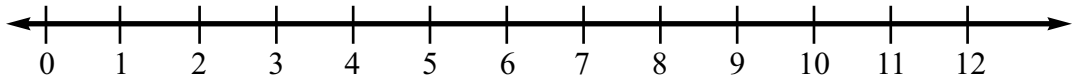
©Copyright 2005, Paradigm Accelerated Curriculum

Graph the following inequalities on the number lines provided.

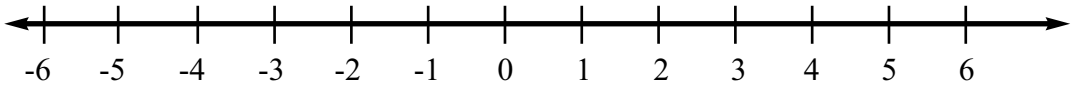
24. $x > 4$



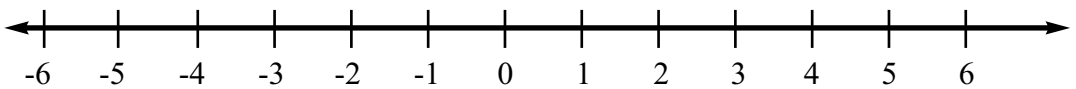
25. $x < 9$



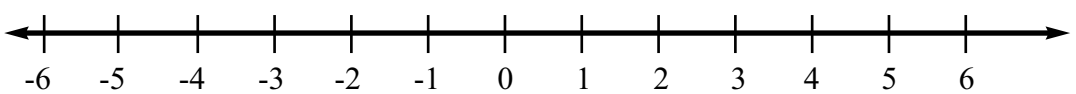
26. $x > -3$



27. $x \leq 5$



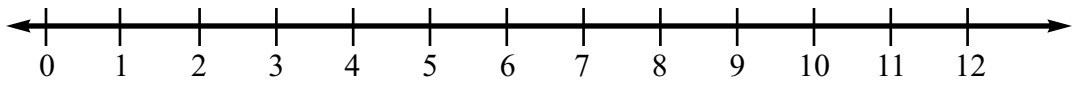
28. $x \geq 1$



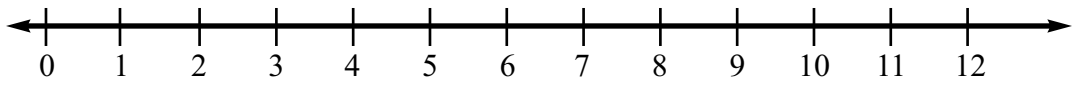
29. John has the same or less money than does Tommy. Supply the numbers on the number line below and graph the inequality that represents how much money John could have if Tommy has $80.00.



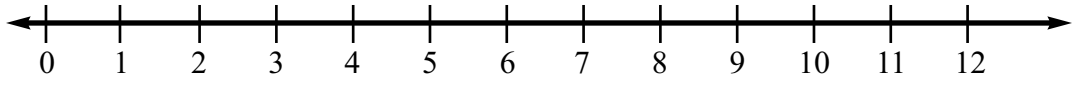
30. Graph the solution to $5x + 5 < 25$ on the number line below.



31. $8x + 1 > 41$

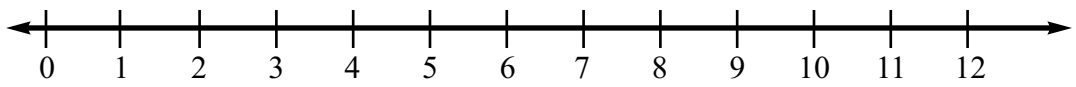


32. $2x + 11 < 21$

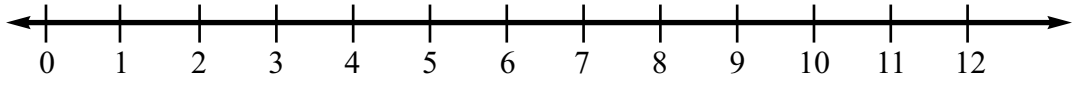


©Copyright 2005, Paradigm Accelerated Curriculum

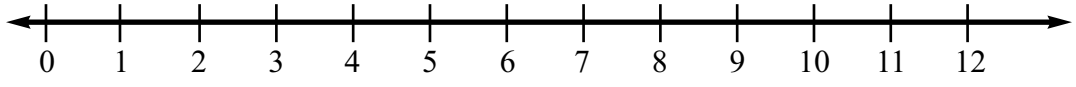
33. $45x - 15 > 75$



34. $x + 16 < 20$



35. $8x + 8 > 56$



Match the following Life Principles.

36. _____ *"A rational person*	(a) *are created equal."*
37. _____ *"Positive or negative choices always*	(b) *equals the trouble you meet."*
38. _____ *"All men*	(c) *of his or her life choices."*
39. _____ *"The company you keep*	(d) *equal positive or negative consequences."*
40. _____ *"A person is the sum*	(e) *calmly works through problems."*

©Copyright 2005, Paradigm Accelerated Curriculum