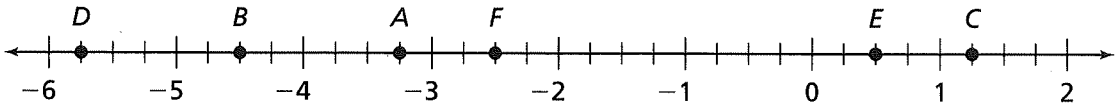
Name: _____

PRACTICE TUTORIAL

Practice & Problem Solving

Scan for Multimedia

In 15–20, write the number positioned at each point.



15. *A*

16. *B*

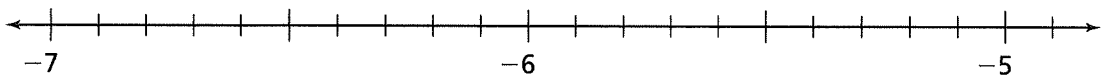
17. *C*

18. *D*

19. *E*

20. *F*

21. **Plot the numbers on the number line below.**



A. $-5\frac{1}{2}$

B. -6.3

C. -5.8

D. $-6\frac{7}{10}$

E. -4.9

F. $-6\frac{9}{10}$

22. **Use <, >, or = to compare.**

A. $\frac{1}{10}$ ◯ 0.09

B. -1.44 ◯ $-1\frac{1}{4}$

C. $-\frac{2}{3}$ ◯ -0.8

D. 0.5 ◯ $\frac{2}{4}$

E. $-2\frac{3}{4}$ ◯ -2.25

F. $-\frac{3}{5}$ ◯ -0.35

23. **Order the numbers from least to greatest.**

A. $-6, 8, -9, 13$

B. $-\frac{4}{5}, -\frac{1}{2}, 0.25, -0.2$

C. $4.75, -2\frac{1}{2}, -\frac{8}{3}, \frac{9}{2}$

D. $4, -3, -8, -1$

E. $-\frac{1}{4}, 0.5, \frac{3}{4}, -\frac{1}{2}$

F. $-\frac{4}{5}, -\frac{5}{4}, -\frac{3}{2}, 1.5$

24. **Make Sense and Persevere** What is the least number of points you must plot to have examples of all four sets of numbers, including at least one positive integer and one negative integer? Explain.

Rational Numbers
numbers that can be expressed as a quotient of two integers $\frac{a}{b}$ $(b \neq 0)$

Integers
whole numbers and their opposites

Whole Numbers
zero and natural numbers

Natural Numbers
the set of counting numbers
1, 2, 3, 4, 5, ...

25. **Reasoning** Suppose you plot the locations of the animals on a number line. Which animal would be represented by the point farthest from 0 on the number line? Explain.

Animal	Possible Locations Relative to Ocean's Surface
Bloodbelly comb jelly	-0.8 km
Deep sea anglerfish	$-\frac{2}{3}$ km
Fanfin anglerfish	$-2\frac{1}{4}$ km
Gulper eel	-1.1 km
Pacific blackdragon	$-\frac{3}{10}$ km
Slender snipe eel	-0.6 km

26. Which animal is closest to a depth of -0.7 km?

27. The change in the value of a stock is represented by the rational number -5.90. Describe, in words, what this means.

28. **Construct Arguments** A classmate ordered these numbers from greatest to least. Is he correct? Construct an argument to justify your answer.

4.4, 4.2, -4.42, -4.24

29. **Make Sense and Persevere** Order -3.25, $-3\frac{1}{8}$, $-3\frac{3}{4}$, and -3.1 from least to greatest. Explain.

30. **Higher Order Thinking** Suppose $\frac{a}{b}$, $\frac{c}{d}$, and $\frac{e}{f}$ represent three rational numbers. If $\frac{a}{b}$ is less than $\frac{c}{d}$, and $\frac{c}{d}$ is less than $\frac{e}{f}$, compare $\frac{a}{b}$ and $\frac{e}{f}$. Explain.

Assessment Practice

31. Which inequality is **NOT** true?

Ⓐ $4\frac{1}{2} > \frac{25}{4}$

Ⓑ $-4\frac{1}{2} > -\frac{25}{4}$

Ⓒ $-6 < -5$

Ⓓ $-\frac{1}{2} < \frac{1}{2}$

32. The numbers below are listed in order from greatest to least. Which could be a value for n?

1.2, 0, n, $-\frac{1}{5}$

Ⓐ $-\frac{1}{2}$

Ⓑ $-\frac{1}{3}$

Ⓒ $-\frac{1}{4}$

Ⓓ $-\frac{1}{6}$