

Good Afternoon!

Today you will need:

- Review packet
- bright green Learning Chart
- pencil
- correcting pen
- planner

Class Time

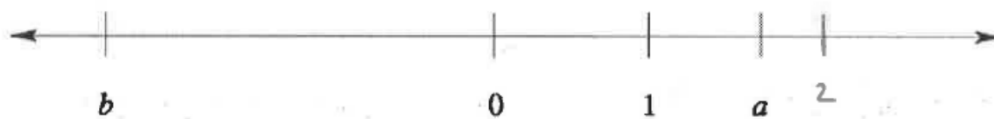
Use your time wisely to finish the Unit Test Review packet.

We will be correcting the packet at _____.

If you finish early, you can:

- work on extra test practice worksheets
- finish any assignments that were incomplete or uncorrected
- re-do homework or Learning Check problems that you got wrong

1. A number line is shown below. The numbers 0 and 1 are marked on the line, and two other numbers, a and b . Assume the number line is drawn to scale.



Using the number line above, which of the following numbers is negative? Choose ALL that apply. Explain your reasoning for each choice.

a. $a - 1$

a is greater than 1, so subtracting 1 will be greater than 0

c. $-(b)$

since b is negative to begin with, opposite $-b$ will be positive

e. $a - b$

since b is negative, subtracting a negative is the same as adding a positive, so the sum will be greater than zero

b. $a - 2$

a is less than 2, so subtracting 2 will give a difference less than 0

d. $a + b$

b is farther from 0 in the negative direction, so the sum will be less than 0

f. $a \cdot b + 1$

a positive times a negative is a negative, and both a and b are farther from zero than 1

2. Malique wants to take four of her friends to a movie. It costs \$5.50 for a ticket and \$3.25 for popcorn.

a. Using your understanding of the distributive property, write TWO equivalent number sentences (one factored and one expanded) that would find the total cost for all five people.

$$5(5.50 + 3.25)$$

$$5 \cdot 5.50 + 5 \cdot 3.25$$

b. What is the total cost for all five people?

$$\begin{array}{r} 5.50 \\ + 3.25 \\ \hline 8.75 \end{array}$$

$$\begin{array}{r} 8.75 \\ \times 5 \\ \hline 43.75 \end{array}$$

$$\boxed{\$43.75}$$

Find the answer to each number sentence. Show work for problems with fractions and decimals.

3. $6 - 10 = -4$

4. $-7 + 15 = 8$

5. $-7 + -9 = -16$

6. $21 - -8 = 29$

7. $12 + -9 = 3$

8. $-7 - -9 = 2$

9. $10 + -6 - -1 + 8 = 13$

10. $-0.8 - -0.72 = -0.08$

$$\begin{array}{r} 0.80 \\ - 0.72 \\ \hline 0.08 \end{array}$$

11. $-5.8 + -7.366 = -13.166$

$$\begin{array}{r} 7.366 \\ + 5.800 \\ \hline 13.166 \end{array}$$

12. $\frac{3}{4} + -1\frac{1}{3} = -\frac{7}{12}$

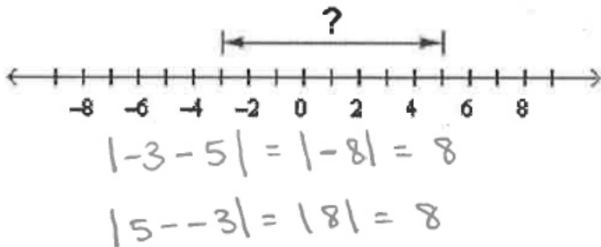
13. $-\frac{4}{5} - 1\frac{1}{5} = -2$

$$\frac{3}{4} + \frac{-4}{3} = \frac{9}{12} + \frac{-16}{12} = \frac{7}{12}$$

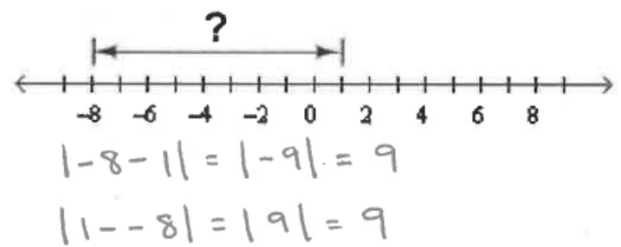
$$\frac{-4}{5} - \frac{6}{5} = \frac{-10}{5} = -2$$

Write two absolute value expressions for the distance between the two points on each number line below. Then, find the value of each expression.

18.

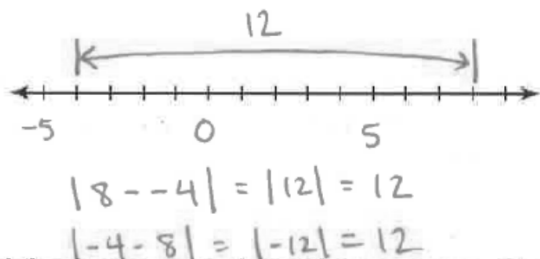


19.

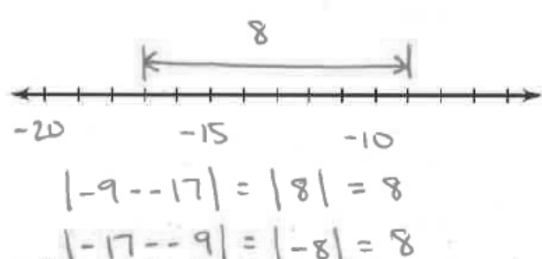


For each pair of points below, write and evaluate two absolute value expressions to represent the distance between the points. Then, make a number line to show the distance between the points.

20. 8 and -4



21. -9 and -17



Find the answer to each number sentence. Show work for problems with fractions and decimals.

22. $20 \cdot -6 = -120$ 23. $-27 \div -9 = 3$ 24. $\frac{-24}{6} = -4$ 25. $-12 \cdot -10 \cdot -6 = -720$

26. $-7.06 \cdot -9.7 = 68.482$

$$\begin{array}{r} 7.06 \\ \times 9.7 \\ \hline 4942 \\ 63540 \\ \hline 68.482 \end{array}$$

27. $0.6 \div -9.6 = -0.0625$

$$9.6 \overline{)0.6} \rightarrow 96 \overline{)6}$$

$$\begin{array}{r} 120 \overline{)6.0000} \\ \underline{0.0625} \\ 96 \overline{)6.0000} \\ \underline{576} \\ 240 \\ \underline{192} \\ 480 \\ \underline{480} \\ 0 \end{array}$$

28. $-1\frac{1}{4} \cdot \frac{3}{7} = -\frac{15}{28}$

29. $2\frac{2}{3} \div -\frac{2}{5} = -\frac{20}{3}$ or $-6\frac{2}{3}$

$$\frac{5}{4} \cdot \frac{3}{7} = \frac{15}{28}$$

$$\frac{8}{3} \cdot \frac{5}{2} = \frac{40}{6} = \frac{20}{3}$$

$$\frac{-480}{0}$$

30. Find the decimal equivalent. Show your work.

a. $\frac{-1}{6} = -0.1\overline{6}$

$$\begin{array}{r} 0.166 \\ 6 \overline{)1.000} \\ \underline{-6} \\ 40 \\ \underline{-36} \\ 40 \\ \underline{-36} \\ 4 \end{array}$$

b. $\frac{-3}{-8} = 0.375$

$$\begin{array}{r} 0.375 \\ 8 \overline{)3.000} \\ \underline{-24} \\ 60 \\ \underline{-56} \\ 40 \\ \underline{40} \\ 0 \end{array}$$

c. $\frac{8}{-3} = -2.\overline{6}$

$$\begin{array}{r} 2.666 \\ 3 \overline{)8.000} \\ \underline{-6} \\ 20 \\ \underline{-18} \\ 20 \\ \underline{-18} \\ 20 \end{array}$$

Find the value of each expression. Show all steps.

31. $4 - 4 \cdot 2 + 2 - 1$

$$\underline{4 - 8} + 2 - 1$$

$$\underline{-4 + 2} - 1$$

$$\underline{-2 - 1}$$

$$\textcircled{-3}$$

32. $2 \cdot (3 + -10) - 2^2$

$$2 \cdot (-7) - \underline{2^2}$$

$$\underline{2 \cdot -7} - 4$$

$$\underline{-14 - 4}$$

$$\textcircled{-18}$$

33. $(5 + -3) \cdot 4 - 2 + 5^2$

$$2 \cdot 4 - 2 + \underline{5^2}$$

$$\underline{2 \cdot 4} - 2 + 25$$

$$\underline{8 - 2} + 25$$

$$6 + 25$$

$$\textcircled{31}$$

34. $3^2 \cdot -2(-5 + -2 \cdot 3) \div 7$

$$3^2 \cdot -2(\underline{-5 + -6}) \div 7$$

$$\underline{3^2} \cdot -2(-11) \div 7$$

$$\underline{9 \cdot -2(-11)} \div 7$$

$$\underline{-18(-11)} \div 7$$

$$198 \div 7$$

$$\textcircled{28 \frac{2}{7}} \text{ or } \textcircled{\frac{198}{7}}$$

$$35. -\frac{1}{3} \div \frac{1}{2} \cdot 1\frac{5}{6} - 1\frac{2}{3}$$

$$-\frac{1}{3} \cdot \frac{2}{1} \cdot \frac{11}{6} - \frac{5}{3}$$

$$-\frac{2}{3} \cdot \frac{11}{6} - \frac{5}{3}$$

$$-\frac{22}{18} - \frac{30}{18}$$

$$\frac{-52}{18}$$

$$\left(\frac{-26}{9}\right) \text{ or } \left(\frac{-28}{9}\right)$$

$$36. \underline{(-2.5 - 3.84)} \cdot -4.1 - -5.1$$

$$\underline{-6.34} \cdot -4.1 - -5.1$$

$$25.994 - -5.1$$

$$\boxed{31.094}$$

$$\begin{array}{r} 2.50 \\ + 3.84 \\ \hline 6.34 \end{array}$$

$$\begin{array}{r} 6.34 \\ \times 4.1 \\ \hline 634 \\ + 25360 \\ \hline 25994 \end{array}$$

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$$\begin{array}{r} 25.994 \\ + 5.100 \\ \hline 31.094 \end{array}$$

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$$37. 4 - 4 \cdot 2 + 2 \cdot -1 + (4^2 - 10)$$

$$4 - 4 \cdot 2 + 2 \cdot -1 + (16 - 10)$$

$$4 - 4 \cdot 2 + 2 \cdot -1 + 6$$

$$4 - 8 + 2 \cdot -1 + 6$$

$$4 - 8 + -2 + 6$$

$$-4 + -2 + 6$$

$$-6 + 6$$

0

$$39. 4^2 + \frac{-10}{2} + 13$$

$$16 + \frac{-10}{2} + 13$$

$$16 + -5 + 13$$

$$11 + 13$$

24

$$38. 2 \cdot (3 + -10) - 2^2 + (-3)^2$$

$$2 \cdot -7 - 2^2 + (-3)^2$$

$$2 \cdot -7 - 4 + (-3)^2$$

$$2 \cdot -7 - 4 + 9$$

$$-14 - 4 + 9$$

$$-18 + 9$$

-9

$$40. 23 - (2 - 3 \cdot 4)^2 + 6\frac{1}{4}$$

$$23 - (2 - 12)^2 + 6\frac{1}{4}$$

$$23 - (-10)^2 + 6\frac{1}{4}$$

$$23 - 100 + 6\frac{1}{4}$$

$$-77 + \frac{25}{4}$$

$$-\frac{308}{4} + \frac{25}{4} = \frac{-283}{4} \text{ or } -70\frac{3}{4}$$

$$\begin{aligned}
41. \quad & 20 - (60 \div (-2 \cdot 30) - 8) \cdot 2^2 \\
& 20 - (\underline{60 \div -60} - 8) \cdot 2^2 \\
& 20 - (\underline{-1} - 8) \cdot 2^2 \\
& 20 - -9 \cdot \underline{2^2} \\
& 20 - -9 \cdot 4 \\
& 20 - -36 \\
& \quad \textcircled{56}
\end{aligned}$$

$$\begin{aligned}
42. \quad & (8 - 20) \div 2^2 - 5 \cdot -3 \\
& \underline{-12} \div \underline{2^2} - 5 \cdot -3 \\
& \underline{-12 \div 4} - 5 \cdot -3 \\
& \quad -3 - \underline{5 \cdot -3} \\
& \quad -3 - -15 \\
& \quad \quad \textcircled{12}
\end{aligned}$$

$$43. \underline{5 \cdot 2} \cdot 3 + 12 \div 6$$

$$\underline{10} \cdot 3 + 12 \div 6$$

$$30 + \underline{12} \div 6$$

$$30 + 2$$

$$\textcircled{32}$$

$$44. 14 \cdot (2 + 3 - \underline{2 \cdot 2}) \div (4^2 - 3^2)$$

$$14 \cdot (\underline{2+3} - 4) \div (4^2 - 3^2)$$

$$14 \cdot (\underline{5} - 4) \div (4^2 - 3^2)$$

$$14 \cdot (1) \div (4^2 - 3^2)$$

$$14 \cdot 1 \div (16 - \underline{3^2})$$

$$14 \cdot 1 \div (16 - 9)$$

$$\underline{14} \cdot 1 \div 7$$

$$\underline{14} \div 7$$

$$\textcircled{2}$$

Extra Practice

There are extra worksheets to practice the skills and standards on the unit test:

- Understand Addition and Subtraction (7.NS.1b/c)
- Add and Subtraction Rational Numbers (7.NS.1d)
- Understand Multiplication and Division (7.NS.2a/b)
- Multiply and Divide Rational Numbers (7.NS.2c)
- Order of Operations (7.NS.3)

All worksheets and answer keys will also be available on my website this afternoon

Homework:

study and bring silent reading book

**(extra practice worksheets and keys will
be available on my website)**