Review for Integer Test

1) When **adding** integers with the same signs you _____________

2) When **adding** integers with **different** signs you _____________

3) When **subtracting** integers follow the rules for **adding** integers.

   BEWARE of DOUBLE **negative**_. Change them to addition.

4) When **multiplying/dividing** 2 integers with the same sign the answer will be _____________

5) When **multiplying/dividing** 2 integers with **different** signs the answer will be _____________

6) What is the only integer that is neither positive nor negative? _____________

7) Is 0 an integer? **yes** Why or why not? **because it is a whole number**

Simplify each of the following.

8) \(8 + -8 = \) \(\square\) 9) \(-78 + -15 = \) \(-93\)

10) \(-20 + 25 = \) \(5\) 11) \(-26 + -14 = \) \(-12\)

12) \(-26 + 2 = \) \(-12\) 13) \(-8 \cdot 9 = \) \(-72\)

14) \(-4 \cdot -2 = \) \(8\) 15) \(-\frac{18}{-6} = \) \(3\)

16) \(-18 + 10 + 16 - 5 = \) \(-17\)

17) \(-25 + 5 + 10 - 2 = \) \(-22\)

Evaluate each expression when: \(x = -2, y = -4, z = -6\)

18) \(xyz\) 19) \(11y - 2x\) 20) \(2x - z\)

\[\frac{(-2)(-4)(-6)}{(+8)(-6)}\] 21) \(\frac{yz + 1}{x - 3}\)

\[\frac{(-4)(-6) + 1}{-2-3}\]

\[\frac{24 + 1}{-5} = \frac{25}{-5} = [-5, 4]\] 22) \(2(x - y)\)

\[\frac{2(-2 - -4)}{2(-2+4)}\] 23) \(\frac{z + y}{x}\)

\[\frac{-6 + -4}{-2} = \frac{-10}{-2}\]
Read each problem carefully, write a number sentence and evaluate.

24) A submarine at -140 feet dives 300 feet. What is the submarine’s position after the dive?

\[-140 + (-300) = -440 \text{ ft.} \quad \text{The Sub position} \quad \frac{140}{15} = -440 \text{ ft}\]

25) The temperature outside was 22°F. The wind chill made it feel like -8°F. Find the difference between the real temperature and the apparent temperature.

\[22 - (-8) = 30 \quad \text{The difference in temperature was 30°F}\]

26) The enrollment at Davis Middle School dropped by 60 students over a 5-year period. What is the average yearly drop in enrollment?

\[60 \div 5 = 12 \quad \text{Students} \quad \text{about 12 students were dropped per year}\]

State the additive inverse for each of the following.

27) 24 __24__ 28) __44__ 29) -4 __-4__

Compare using > or <.

30) -5 ___0 31) 12 ___15 32) -15 ___15 33) -9 ___(-11)

Put the integers in order from least to greatest.

34) -20, 8, -31, -5, 11, -31, -20, -5, 8, 11, -58, -98, -58, 114, -102, -58, 98, 114

Find the absolute value of each integer.

36) \(|22| = 22\) 37) \(|13| = 13\) 38) \(|512| = 512\) 39) \(|102| = 102\)

40) \(|5 - 8| = 3\) 41) \(|-8 + 10| = 2\) 42) \(|7| + |7| = 14\)

\(|-3| = 3\) \(|12| = 12\) \(|7 + 7| = 14\)