

Name _____

(2.5) Evaluate the expression.

1) $-2 + 9 \cdot 7$

2) $4 \cdot 8 - 9^2$

3) $3 \cdot (10 - 17)^2$

4) $\frac{4(-5) - 6 + 2}{-72 \div 3}$

5) $\left| \frac{6 - 4(-1)}{12 - (17)} \right|$

6) $|10(-5)| - |1 - 3|$

7) $-1 - 6\sqrt{49}$

8) $\frac{-4(3^2) - 3(9 - 4)}{-3(5 - 9) \div (-4)}$

9) $\frac{-22 + |5(8 - 14)| + 4}{22 - 8 - 3^3 + 16}$

Insert parentheses as needed in the expression in order to make it equal to 0. More than one set of parentheses may be needed.

10) $3 + 3 \cdot 4 - 5$

11) $7^2 \div 4 + 3 - 7$

Evaluate the expression for the given values of the variables, if possible.

12) $-x + y \cdot 4$, for $x = 1$, $y = 6$

13) $m + 90 \div (n)$, for $m = -15$, $n = -6$

14) $n \cdot (m - 12)^2$, for $m = 7$, $n = 7$

15) $\frac{2^2 + 6(d)}{3 + (c)}$, for $c = -16$, $d = -5$

16) $-\sqrt{a^2 - b^2}$, for $a = 20$, $b = 12$

(2.6) Determine if the given value is a solution to the given equation.

17) -10 , $y - 3 = -13$

18) 5 , $\frac{-22}{x + 6} = -2$

Solve the equation.

19) $7 = a - (-13)$

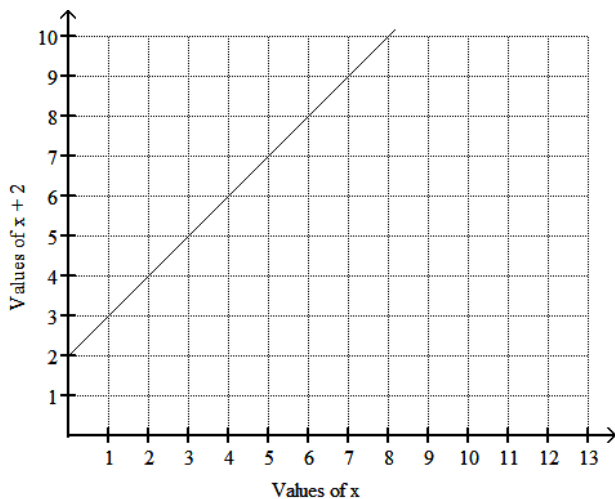
20) $-80 \div t = -20$

21) $(-x)^3 = 125$

22) $\sqrt{y} = 15$

Solve the given equation visually.

23) $x + 2 = 7$

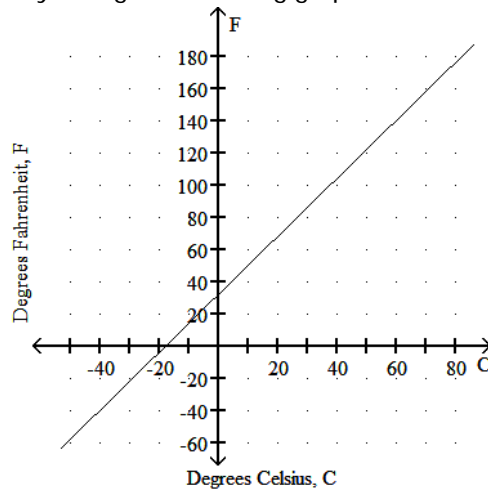


Solve the problem.

24) The equation $F = \frac{9}{5}C + 32$ is used to convert a

temperature given in degrees Celsius C to its equivalent temperature in degrees Fahrenheit F. Find the temperature C if the temperature F is -40 by solving the equation $-40 = \frac{9}{5}C + 32$

visually, using the following graph.



25) To convert a temperature F given in degrees Fahrenheit to an equivalent temperature C in degrees Celsius, use the formula $C = \frac{5(F - 32)}{9}$.

Find the Celsius temperature that is equivalent to -31°F .

26) Find the average of the list of Fahrenheit temperatures.

$-17^\circ, 2^\circ, -9^\circ, 3^\circ, 12^\circ, -5^\circ, \text{ and } 7^\circ\text{F}$

Answer Key

Testname: WKS_2.5_2.6

- 1) 61
- 2) -49
- 3) 147
- 4) 1
- 5) 2
- 6) 48
- 7) -43
- 8) 17
- 9) 4
- 10) $3 + 3 \cdot (4 - 5)$
- 11) $7^2 \div (4 + 3) - 7$
- 12) 23
- 13) -30
- 14) 175
- 15) 2
- 16) -16
- 17) Yes
- 18) Yes
- 19) -6
- 20) 4
- 21) -5
- 22) 225
- 23) 5
- 24) -40°C
- 25) -35°C
- 26) -1°F