

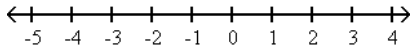
Chapter 1 TECM 119 Practice Test

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

Locate each number on a number line.

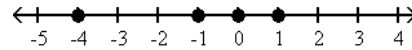
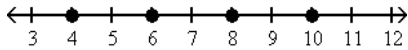
1) $-4, -2, 0, 2$

1) _____



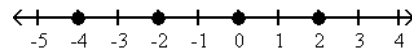
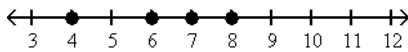
A)

B)



C)

D)



Use $<$, $>$, or $=$ to make a true sentence.

2) $|-8|$ $|2|$

2) _____

A) =

B) $<$

C) $>$

Find the absolute value.

3) $|-9.48|$

3) _____

A) -9.48

B) ± 9.48

C) 0

D) 9.48

Add. Do not use a number line except as a check.

4) $2 + (-7)$

4) _____

A) 9

B) -9

C) 5

D) -5

5) $-8 + (-69)$

5) _____

A) -77

B) -61

C) 77

D) 61

Subtract.

6) $-4 - (-4)$

6) _____

A) -4

B) 0

C) 8

D) -8

7) $112 - 113$

7) _____

A) -225

B) 1

C) -1

D) 225

Perform the indicated operation.

8) $20 + 6 + (-25)$

8) _____

A) 39

B) 51

C) 1

D) -11

9) $4 + (-11) - (-5) - 4 + (-10)$

9) _____

A) -18

B) -8

C) 24

D) -16

Solve the problem.

- 10) The stock market gained 60 points on Tuesday and lost 16 points on Wednesday. It had closed on Monday at 2779 points. Where did the market close on Wednesday? 10) _____
A) 2823 points B) 2735 points C) 2703 points D) 2855 points

- 11) A bike road race starts at an elevation of 500 feet and passes through 5 stages where the elevation changes by -139 feet, -63 feet, 197 feet, 27 feet, and -327 feet. At what elevation does the race end? 11) _____
A) 195 feet B) -1253 feet C) 1253 feet D) 402 feet

Find the product.

- 12) $(33)(-24)$ 12) _____
A) -792 B) -892 C) 792 D) -825

- 13) $(5)(-4)(-4)$ 13) _____
A) 80 B) 90 C) -40 D) -80

- 14) $(-3)(-3)(-3)$ 14) _____
A) -37 B) -27 C) 27 D) -17

Perform the indicated operation.

- 15) $\frac{-76}{4}$ 15) _____
A) 19 B) -29 C) -19 D) $-\frac{1}{19}$

- 16) $\frac{-279}{-31}$ 16) _____
A) $\frac{1}{9}$ B) -9 C) 9 D) -1

- 17) $\frac{-50}{0}$ 17) _____
A) 50 B) 1 C) Undefined D) 0

- 18) $\frac{5(-8)}{-6(-4)}$ 18) _____
A) $-\frac{3}{10}$ B) $\frac{3}{10}$ C) $-\frac{5}{3}$ D) $\frac{5}{3}$

Provide an appropriate response.

- 19) If a negative integer is subtracted from a positive integer, what can you say about the result? 19) _____
A) The result will be a negative integer.
B) The result could be either a positive or negative integer.
C) The result will be a positive integer.
D) The result will be positive and may or may not be an integer.

Solve the problem.

- 20) During a drought, the water level in a river dropped 3 inches each day for 8 straight days. What was the change in the water level of the river during this period? 20) _____
A) -11 inches B) 11 inches C) -24 inches D) 24 inches

Rewrite using the appropriate base and exponent. (Don't evaluate.)

- 21) $20 \times 20 \times 20 \times 20$ 21) _____
A) 4^{20} B) $4 \cdot 20$ C) 20^4 D) 20

Write the expression as products.

- 22) -5^3 22) _____
A) $-5 \times -5 \times -5$ B) -125 C) -15 D) $-(5 \times 5 \times 5)$

Evaluate the expression.

- 23) -9^2 23) _____
A) -729 B) 729 C) -81 D) 81

- 24) $-\sqrt{1.44}$ 24) _____
A) -0.12 B) 1.2
C) Not a real number D) -1.2

- 25) $(\sqrt{49})(2^3)$ 25) _____
A) 56 B) 27 C) 2744 D) 42

Find the value of the expression.

- 26) $\frac{4 \times (8 + 5) + 4 \times 2}{4 \times (7 - 1)}$ 26) _____
A) $3\frac{1}{27}$ B) 2 C) $2\frac{1}{2}$ D) $2\frac{2}{9}$

Simplify.

- 27) $3 \cdot (3 + 4)^2 - 4 \cdot (6 - 4)^2$ 27) _____
A) 377 B) 572 C) 153 D) 131

Express the number in standard notation.

- 28) 4.561×10^6 28) _____
A) 45,610,000 B) 456,100 C) 273.66 D) 4,561,000

Express the number in scientific notation.

- 29) 0.00004752 29) _____
A) 4.752×10^{-5} B) 4.752×10^4 C) 4.752×10^{-4} D) 4.752×10^5

Perform the indicated calculations. Express the answer in scientific notation.

- 30) $42,061 + 4740$ 30) _____
A) 4.6801×10^4 B) 1.9937×10^8 C) 4.6801×10^{-1} D) 8.8736

Change numbers in ordinary notation to scientific notation and change numbers in scientific notation to ordinary notation.

- 31) A computer can do one calculation in 1.4×10^{-7} seconds. 31) _____
A) 0.000014 B) 14,000,000 C) 0.000000014 D) 0.00000014

Solve.

- 32) A research submarine is lowered at an average rate of 5 feet per second. What will be the submarine's depth after 30 seconds? 32) _____
A) 175 ft. B) 6 ft. C) 150 ft. D) 300 ft.

Chapter 1 TECM 119 Practice Test

Answer Key

- 1) D
- 2) C
- 3) D
- 4) D
- 5) A
- 6) B
- 7) C
- 8) C
- 9) D
- 10) A
- 11) A
- 12) A
- 13) A
- 14) B
- 15) C
- 16) C
- 17) C
- 18) C
- 19) C
- 20) C
- 21) C
- 22) D
- 23) C
- 24) D
- 25) A
- 26) C
- 27) D
- 28) D
- 29) A
- 30) A
- 31) D
- 32) C