

Chapter 2 TECM 119 Practice Test

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

Use unit analysis to make the necessary conversion.

- 1) Change 4.40 feet per second to miles per hour. 1) _____
A) 3 mph B) 264 mph C) 0.05 mph D) 15,840 mph

- 2) Change 28 ounces to pounds 2) _____
A) 28 lb B) 1.8 lb C) 448 lb D) 280 lb

Solve the problem.

- 3) A squirrel is moving at a speed of 16 feet per second. At this rate, how long would it take the squirrel to travel one mile? Give your answer in minutes, to the nearest tenth. 3) _____
A) 0.1 min B) 5.5 min C) 6.1 min D) 330.0 min

- 4) Larry buys 51 inches of door molding which costs \$5.36 per yard. How much does he pay? 4) _____
A) \$10.72 B) \$22.78 C) \$7.59 D) \$2.68

Give the symbol and meaning of the given unit.

- 5) megaampere 5) _____
A) mA; 1 mA = 1,000,000 A B) MA; 1 MA = 1,000 A
C) μ A; 1 μ A = 1,000,000 A D) MA; 1 MA = 1,000,000 A

- 6) microohm 6) _____
A) m Ω ; 1 m Ω = 0.000001 Ω B) $\mu\Omega$; 1 $\mu\Omega$ = 1,000,000 Ω
C) $\mu\Omega$; 1 $\mu\Omega$ = 0.00001 Ω D) $\mu\Omega$; 1 $\mu\Omega$ = 0.000001 Ω

Give the name and meaning for the unit with the given symbol.

- 7) μ m 7) _____
A) millimeter; 1 μ m = 0.001 m B) micrometer; 1 μ m = 0.00001 m
C) micrometer; 1 μ m = 0.000001 m D) megameter; 1 μ m = 1,000,000 m

- 8) cg 8) _____
A) centigram; 1 cg = 10 g B) centigram; 1 cg = 100 g
C) centigram; 1 cg = 0.01 g D) centigram; 1 cg = 0.001 g

Solve the problem.

- 9) Use only the base units to give the proper symbol in the metric and U.S. Customary systems for the unit of temperature change per unit of time 9) _____
A) $^{\circ}$ C/s; $^{\circ}$ F/s; B) $^{\circ}$ K/s; $^{\circ}$ C/s; C) $^{\circ}$ F/s; $^{\circ}$ C/s; D) $^{\circ}$ C/hr; $^{\circ}$ F/hr;

Use a different unit to rewrite the given quantity so that it is between 1 and 10. Use the proper unit symbol in your answer.

- 10) 360 seconds 10) _____
A) 3 hr B) 6 min C) 6 hr D) 3 min

11) 6100 grams
A) 6.1 mg B) 6.1 kg C) 6.1 μ g D) 6.1 cg 11) _____

12) 95 millimeters
A) 9.5 m B) 9.5 mm C) 9.5 km D) 9.5 cm 12) _____

Solve the problem.

13) How many centimeters are there in 97 m?
A) 9700 cm B) 97,000 cm C) 0.97 cm D) 0.097 cm 13) _____

14) Reduce 8 gal to quarts.
A) 128 qt B) 4 qt C) 32 qt D) 64 qt 14) _____

15) Convert 22 km to miles.
A) 13.7 mi B) 20.8 mi C) 23.3 mi D) 35.4 mi 15) _____

16) Convert 43 kg to pounds.
A) 94.8 lb B) 109.2 lb C) 45.6 lb D) 19.4 lb 16) _____

Solve the problem. Round amounts to the nearest tenth unless indicated otherwise.

17) In a certain coastal basin, the sea water contains 3.9 grams of salt per 1000 milliliters of water. How many grams of salt would be in 3 liters of the sea water?
A) 1170 g B) 11.7 g C) 117 g D) 0.117 g 17) _____

Determine whether the given number is approximate or exact.

18) Jennifer has 32 teeth.
A) Exact B) Approximate 18) _____

Determine the number of significant digits in the given approximate number.

19) 491,000
A) 3 B) 2 C) 5 D) 6 19) _____

Round off the approximate number as indicated.

20) 1564 3 significant digits
A) 1600 B) 1564 C) 1570 D) 1560 20) _____

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Answer Key

- 1) A
- 2) B
- 3) B
- 4) C
- 5) D
- 6) D
- 7) C
- 8) C
- 9) A
- 10) B
- 11) B
- 12) D
- 13) A
- 14) C
- 15) A
- 16) A
- 17) B
- 18) A
- 19) A
- 20) D